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Retraction

Retracted: Redistribution of Resources: Sustainable System Mechanisms for Enterprise Migration

Scientific Programming

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This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

- (1) Discrepancies in scope
- (2) Discrepancies in the description of the research reported
- (3) Discrepancies between the availability of data and the research described
- (4) Inappropriate citations
- (5) Incoherent, meaningless and/or irrelevant content included in the article
- (6) Peer-review manipulation

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

References

[1] Y. Wang, Y. Liang, Y. Wang, Z. Li, and C. Guo, "Redistribution of Resources: Sustainable System Mechanisms for Enterprise Migration," *Scientific Programming*, vol. 2022, Article ID 2898460, 17 pages, 2022. Hindawi Scientific Programming Volume 2022, Article ID 2898460, 17 pages https://doi.org/10.1155/2022/2898460



Research Article

Redistribution of Resources: Sustainable System Mechanisms for Enterprise Migration

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The comprehensive reasons for the cross-regional flow of enterprises in their own economy are studied in this paper. Most traditional enterprise migration research focuses on the impact of a single factor. Even the research on the influence of multiple factors often ignores the interaction of various factors. Therefore, this paper proposes and logicalises the "push and pull" mechanism of enterprise migration to address the limitations of previous research. Through bibliometric analysis and investigation, we systematically think about the factors that affect the corporate migration mechanism and improve the Push-Pull Theory. Besides, by deploying a conceptual system dynamics model, this paper explains how various factors affect enterprise migration. In addition, we discussed how to adopt systems thinking to promote the development of emerging economies. We selected and tested 6 companies that migrated in China, and the results are in line with reality. The conclusion supports the theory that systematic thinking and decision-making influence corporate behaviour.

1. Introduction

With the deepening of globalization, cross-border migration and investment of enterprises have become very common [1]. However, due to market orientation or cost orientation, many enterprises choose to migrate within their territory [2]. This situation has been increasing in emerging economies under economic transition in recent years [3–5]. The migration of enterprises in the country affects the flow of capital, personnel, and market structure change [6]. Therefore, it is essential and urgent to study the antecedents of enterprise migration when considering the impact on the overall regional economy.

The existing literature expands our understanding of the antecedents of enterprise migration from a single factor affecting enterprise migration [2, 7–11]. However, as a microeconomic system, the migration of enterprises is not affected by just a single factor but by a series of interactive economic factors [12]. The existing research has not considered the influencing factors of enterprise migration behaviour from the enterprise's overall internal and external

environment, which is regrettable. On the one hand, it is common for enterprises to be affected by external factors (such as administrative orders) and internal governance structure, especially in emerging economies [2, 9]. For example, some enterprises in Dongguan City, Guangdong Province, China, have moved to Northwest China due to the combined effect of environmental protection regulation requirements and enterprise human resource costs. On the other hand, relevant studies show that the migration behaviour of enterprises has anthropomorphic characteristics at the same time, which is deeply influenced by corporate symbols such as executives [13]. Especially when the executive power structure is relatively centralized, relocation behaviour is usually affected by the executive team's background. In the existing research, there is a lack of systematic consideration of the above factors [14].

1.1. Overview of Push-Pull Theory. In this study, to narrow the gap between the above theory and practice, we use system dynamics theory and high-level echelon theory for

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reference to develop our theoretical model. At the same time, we build a Push-Pull theoretical model of the interaction between internal and external factors and finally explain the motivation system model of enterprise migration behaviour. Specifically, we believe that enterprises' choice of migration behaviour is affected by internal and external factors. The influence of these two parts does not act alone on enterprises' strategic decision-making but interacts with each other. We define this mechanism as the Push-Pull Theory. We explain the Push-Pull Theory model from three aspects: first, the external environment of the enterprise is constantly changing, which promotes or inhibits the migration of the enterprise; second, the internal environment of the enterprise is continually evolving, enabling the enterprise to change or driving the enterprise to maintain the status quo; third, the external environment of the enterprise interacts with the internal information of the enterprise, comprehensively promoting the enterprise to make migration decisions or driving the enterprise to maintain the current business strategy.

1.2. The Logic of Push-Pull Theory. We make a detailed theoretical analysis of the above three aspects. According to the organizational change management theory within the enterprise, there are two forces to promote organizational change and maintain the enterprise's current situation [15, 16]. We believe that the power to encourage organizational change is reflected in the process of enterprise migration, which represents the internal thrust of the enterprise; the strength of maintaining the current situation of the organization is reflected in the process of enterprise migration, which is expressed as the pull force within the enterprise. At the same time, we deduce the deeper mechanism of these two forces and the game process. Based on the high echelon theory, our theory holds that the senior management team, as the direct decision-maker of the enterprise, has a direct impact on the operation of the enterprise according to the signal transmission theory [17]. Therefore, the will of the senior management team plays a vital role in the internal decision-making of the enterprise [18]. Specifically, we believe that the top management team's attachment to the current location of the enterprise is a pull that hinders the migration behaviour of the enterprise [19]. At the same time, the yearning and pursuit of the top management team for the target location of enterprise migration is the thrust to promote the migration behaviour of enterprises. In such a "push-pull" game, enterprises eventually have a preference for whether to migrate internally.

Outside the enterprise, the macroenvironment has a significant impact on the enterprise, and our theory divides this influence into the dual effect of government and market [20]. In terms of the power of market entities on enterprise migration decisions, we use the Push-Pull Theory to supplement the commonly used "cost-profit" orientation theory [21]. Different positions of enterprises in the market affect their decision-making, which is reflected in market share, upstream and downstream bargaining power, and so on

[22]. However, the ultimate goal of enterprises is to achieve greater profits. In the market environment, the overall industrial development represents the difficulty for enterprises to obtain profits [22]. With mature development and close to perfect competition, enterprises will face lower entry costs and smaller profits in the market and industry. In unknown or immature markets and industries, enterprises face more significant development costs and higher profits. We believe that cost and profit will become an important reason to drive or hinder enterprise migration [23]. At the same time, we also include exogenous factors not considered in traditional theories, such as the overall market prospect and market public opinion environment, into the Push-Pull Theory [19, 24]. We believe that these exogenous factors will promote or hinder migration with a multiplier effect. The power of "push" and "pull" is more direct in the impact of the government on the decision-making of enterprise migration. The government's influence on enterprises due to compulsory policies such as environmental regulation is the "push" power of enterprise migration [25]. The government's tax preference and financial support are the "pull" power of enterprise migration [26]. The interaction between the push power and pull power constitutes the external constraints of the government on enterprise migration. According to the theory of new structural economics, the influence of government and market on enterprises is not acting alone, their mechanism of action is dynamically related to the social context [27, 28]. We incorporate this relationship into the Push-Pull Theory to explain the game impact of two factors on enterprises. Due to the resource endowment and resource allocation, the market will guide the agglomeration and migration of enterprises. To optimize the allocation of regional economic structure and achieve some noneconomic objectives of the government, the government will use government authority, such as administrative regulation and tax guidance, to enable enterprises to achieve agglomeration and migration [9]. However, when the market fails to realize the authority appeal of the government, the administrative regulations of the government will affect the location choice of enterprises in a way contrary to market forces. For example, high-polluting enterprises in China's coastal areas will migrate to inland areas with high costs and small profits due to environmental protection regulations [29]. Market tax is the cornerstone of government finance.

Furthermore, governments can use market taxation as a powerful tool for environmental regulation [29]. However, when the government's administrative regulation affects industrial development to a certain extent, the government's authority will be weakened. Then the government will reduce the restrictions on companies' migration behaviour. The game between government power and market power will promote or pull the migration of enterprises in the form of environmental impact.

The above two internal and external factors will also produce a "push-pull" effect inside enterprises. Due to the association between the internal senior management team and government personnel, the government has a direct impact on the production factors such as tax preference and

land rental of the enterprise and promotes the internal migration intention of the enterprise to the place where the government is located [30]. Moreover, the market has a more direct impact on the inner mood of the enterprise. First, the market cost and the profits obtained by the enterprise in the current regional market are relatively transparent, and the development prospect of the enterprise's industry in the current regional market is also relatively transparent, which will directly or indirectly promote or stimulate the generation of internal decisions of the enterprise migration. The "narrative economic theory" discusses the influence of market emotion and narration on the people [31, 32]. We extend this influence to enterprise decision-making and improve the Push-Pull Theory. Specifically, we believe that the market public opinion environment will trigger the emotional fluctuation of the enterprise's senior management team. Because the senior management team is not an entirely rational person, this emotional fluctuation will affect the enterprise's decisionmaking to a certain extent [33]. Therefore, we have made a relatively complete explanation for the Push-Pull Theory.

1.3. Push-Pull Theory and Reality Connection. There are three reasons why this paper chooses China as the actual comparison of the model construction of this paper. These three reasons can prove that our research has practical significance. Cross-border mergers, acquisitions, and corporate migration are becoming more common. This trend is closely related to the development of information technology [34]. The migration trend of multinational enterprises is constantly active and has attracted the attention of academic circles. However, different from the cross-enterprise migration, the cross-regional migration of enterprises in their own country has the same beginning as the migration of multinational enterprises. Still, its internal logical mechanism and migration process is different. As the largest developing country, China has a large geographical area and different degrees of development. The cross-regional migration of enterprises is in line with the goal of global enterprise migration from resource allocation. However, in terms of internal motivation, due to the convergence of Chinese culture, it also meets the characteristics of domestic enterprise migration in a general sense [35]. At the same time, China has a perfect industrial chain, and the domestic migration needs of Chinese enterprises are different from the migration demands of traditional multinational enterprises seeking to embed themselves into the international industrial chain. At the same time, due to the advantages of the whole industrial chain, Chinese enterprises consider more the conditions of government and market economy in migration and make more rational and wise decisions to adapt to the ecosystem. This decision-making consideration is from the enterprise itself, considers the industry and social development, and may contribute. As China's economy is undergoing transformation and enterprises are also experiencing the process from initial development to digital production, this creates much space for enterprises to migrate and seek better development [36, 37]. Some studies

show that the migration behaviour of domestic enterprises in China has become active in recent years [2].

Second, China has a vast geographical area, in which the degree of economic development in each region is uneven. At the same time, due to different considerations, local governments provide various policies for different types of enterprises, which creates excellent and low-cost conditions for enterprise migration [38-40]. By observing and analyzing the choice of enterprises under different conditions, it is found that the decision of enterprise migration in different countries has different meanings. For emerging economies such as Southeast Asia, learning from China's experience is helpful to realize the optimal allocation of domestic resources. For developed economies such as the United States, the migration process plays a guiding role in attracting overseas enterprises to return and the migration of domestic enterprises [41-43]. For example, the investment and establishment process of the Chinese enterprise "Fuyao Glass" in the United States is similar to the enterprise migration mechanism studied in this paper. This paper hopes that this research will make academic contributions to the realization of "Reindustrialization" in the United States.

Third, the existing research on the antecedents of enterprise migration mainly focuses on a single factor and few studies on the antecedents of enterprise migration from a comprehensive and dynamic perspective.

1.4. Possible Contribution of Push-Pull Theory. This study has made marginal contributions to the antecedents of enterprise migration and the application of new fields of system dynamics. Firstly, this study constructs a dynamic Push-Pull Theory affecting enterprise migration. In recent years, the literature mainly analyzes the enterprise migration behaviour from the perspective of "benefit-cost" from enterprises. Related to this kind of literature, we focus on enterprises' decision-making under the influence of internal and external environment and find that enterprises' migration behaviour is a dynamic decision-making process rather than a simple element in the market-oriented dynamic decision-making, which is a discovery about enterprises' migration behaviour. Secondly, this research combines the method of bibliometric analysis with systematic thinking. By doing so, we ensure that the internal and external factors affecting enterprise migration are as comprehensive as possible to analyze the migration behaviour of enterprises in line with reality. Finally, this research analyzes the help of systematic thinking and decision-making for the government and enterprises through the systematic discussion of government policies and enterprise policies.

1.5. Introduction to Each Part of the Paper. In order to report our findings, this paper is organized as follows. In the introduction part, our theory is proposed and logicalised. This discussion about our theory is not only based on practical considerations but also based on classical literature and theory. Section 2 conceptualizes our theory in the form of index summary. These selected important indicators come from important literature. Therefore, in this part, this paper reviews the literature related to enterprise migration

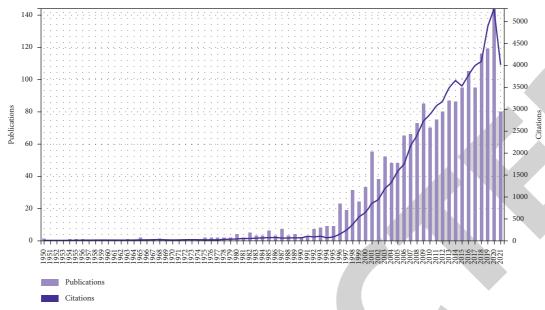


FIGURE 1: Thematic research trend chart.

behaviour on the basis of literature measurement. Section 3 systematizes our theory through the system dynamics model. The causal relationship between each indicator element is analyzed and displayed in this part. Section 4 discusses our theory in reality. This part discusses the policies that the government may adopt and their impact and how enterprises can make better development by means of relocation. In addition, we discussed how to use systematic thinking to promote the development of emerging economies.

2. Theoretical Background and Literature Review

2.1. Data Collection and Research Trends. This paper takes the core database in the Web of Science as the source for literature retrieval. To ensure the total quantity of literature collection, this paper selects "article" and "conference paper" and searches the literature with the theme of "firm migration." After deleting irrelevant information documents, 1513 core documents with the theme of "firm migration" from 1996 to 2021 were obtained. On this basis, this paper analyzes the research trend of enterprise migration behaviour. Figure 1 shows the research trend of enterprise migration behaviour from 1996 to 2021.

As shown in Figure 1, the trend of enterprise migration behaviour research is on the rise. After 2017, the research enthusiasm continues to rise. In 2020, the number of researches on enterprise migration has increased significantly month on month compared with 2019, indicating that the research on enterprise migration behaviour is currently in the field of hot academic topics.

2.2. Literature Cocitation Analysis. The research network of scientific research citation is the knowledge base of scientific research. The cocitation clustering of Cite-Space literature can reflect the frontier of discipline research. At the same

time, the cocitation paper can explain the high academic value of the article. The following literature collection of this paper will start with the factors affecting enterprise migration adopted in the cocitation contribution.

As shown in Figure 2, the cluster is named by the LLR algorithm. Among the cocitation clustering, there are seven categories with more than 25 pieces of literature. We analyzed the seven cluster pieces of literature and collected and sorted the top 100 cited pieces.

2.3. Literature Review and Index Selection. The location of economic activities has been a concern by scholars since its birth. Previous studies mainly provided three methods: neoclassical, behavioural, and institutional [44]. Neoclassical method believes that the location of enterprises for economic activities is based on the strategy of profit maximization and cost minimization. The behavioural approach holds that the motivation of enterprise migration is to better deal with imperfect market information and market uncertainty. Unlike the neoclassical method, the behavioural method believes that the decision-making process of business owners is based on noneconomic factors. The institutional approach holds that, in the process of enterprise location selection, we should not only consider whether the economic environment of the location is suitable for the development of the company but also consider the institutional environment of the location, for example, customers, suppliers, trade unions, regional systems, and government.

At present, the research on the antecedents affecting enterprise migration behaviour generally believes that three groups of main factors affect enterprise migration. They are internal enterprise characteristics, site characteristics, and regional characteristics [12]. Through these three factors and the internal characteristics of enterprises, we consider the site characteristics and regional characteristics of enterprises' moving places and moving places. This research idea is to

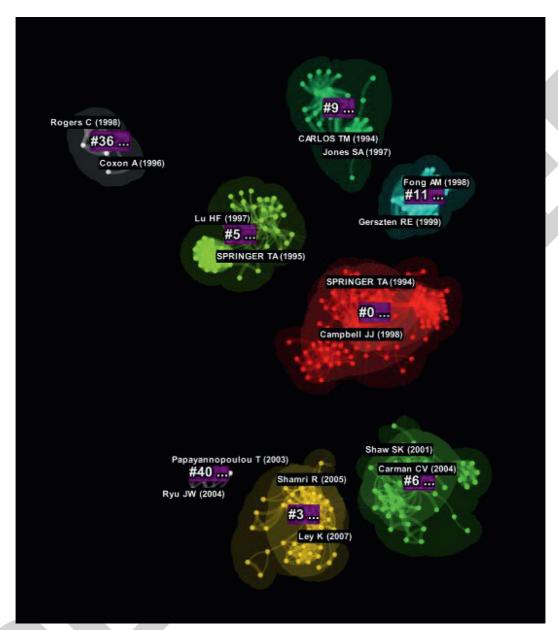


FIGURE 2: Literature clustering results.

expand institutional methods, which comprehensively consider the influencing factors in enterprise migration.

The neoclassical research viewpoint about how relocated enterprises determine where to move in is generally accepted. Economic factors will affect the migration of enterprises. While integrating the institutional approach into the research, the existing research [11] believes that the policy elements under regional characteristics will affect enterprise migration. For China, an emerging economy with a strong government call, it is more important to consider the impact of policies. Previous studies have shown that the main factor of company relocation is the internal characteristics of the enterprise. Specifically, it is mainly due to the lack of expansion space and the personal factors of business owners [45]. Therefore, when introducing the Push-Pull Theory and considering the internal factors of enterprises,

this paper analyzes the internal characteristics of enterprise migration through the interaction and game between considering enterprise development strategy factors and considering enterprise owners' emotional factors.

2.3.1. External: Economic Market Indicators. Firstly, we review the literature and select the indicators related to the economic market in enterprise migration. Some studies show that [46], in the process of overall migration, enterprises will first analyze the current economic level in the region and the economic level in the target region and target to bring their industries into the macroeconomic level to evaluate their industrial development. In the case of enterprise move, the factors that promote the decision to relocate are mainly related to the enterprise's performance

indicators. The consensus that explains the location and relocation of enterprises is that enterprises often look for the most profitable location for relocation and give up their current location. In previous studies [10, 45-49], the relocation behaviour of an enterprise can be conceptualized as a trade-off between the expected cost and expected benefit of the new location compared with the current location. We accept this consideration and fully consider the cost and expected income of the enterprise. In terms of enterprise cost, land cost, raw material cost [50], labor cost, management cost, and transportation and logistics cost [45] in the business process of enterprises are regarded as essential costs in the traditional perspective. We also consider the two costs considered in the new enterprises that attach importance to innovation: the degree of information, technology circulation and the degree of talent activity [12]. When making choices, enterprises should consider the cluster effect caused by the agglomeration of other enterprises. The impact of agglomeration externality on enterprise cost mainly lies in the scale benefits of the cluster allocation of resources and its contribution to the high production process of competitors [10]. We consider the degree of this industrial cluster. Previous studies on industrial agglomeration have been very mature. The positive externalities caused by the spatial concentration of companies in the same industry and the interdependence between companies in different industries are often taken into account in relocation research [51]. Predecessors used various specialization and diversity indicators to capture the externalities caused by agglomeration. See the studies by Groot et al., Mameli et al., and Hong for an overview [52–54]. In previous studies, it is generally believed that the agglomeration has a one-way impact on enterprise decision-making. We believe that the benefits brought by industrial clusters lie in the production cost of enterprises. Due to the accumulation of enterprises, it also reacts to the industry, promotes the full development of the industry and market opening, and improves the degree of complete market competition. In the open market, the market public opinion environment tends to be good [55]. At the same time, due to the increase of industrial enterprise clusters, the cluster externality and strategic interaction between enterprises are increased. For the enterprise, the overall industrial supporting degree is improved, and the market is promising for the industrial market in the region [56].

2.3.2. External: Policy Indicators. We review the literature and select indicators of policy-related influencing factors in the process of enterprise migration. It is found that land rent has an essential impact on enterprise agglomeration and enterprise migration (geographical location spillover). Similarly, land preference is also a form of land rent reduction in China. At the same time, in the development of enterprises, to reduce their costs, they pay great attention to tax and credit (see the studies by de Mooij and Ederveen's literature review in 2003) [57]. In China, due to the different preferential tax policies issued by various regions, the impact on enterprise migration is also different. Most of China's banks and other financial institutions are owned by the state.

Their credit payment level is closely related to the local government's policies, which also affects the financial support of enterprises. Worldwide, the openness and transparency of government are essential for enterprises. Recent research on the investment of Chinese enterprises in Cambodia shows that [58] the Cambodian government has an inhibitory effect on the degree of market opening and reduces the desire of enterprises to invest locally due to corruption and other acts. For China, due to the different attitudes of local governments toward investors, they have different administrative efficiency in the face of the relocation demands of relocated enterprises, affecting the operating costs in the process of enterprise relocation and constituting different operating environment characteristics. At the same time, in addition to practical considerations such as space scale [59], the Chinese government has strict restrictions on whether enterprises can enter the local area due to factors such as environmental regulation and total factor productivity. These restrictions together constitute a level playing field in the local market. Generally speaking, the government constructs the hardware environment and cost of local enterprise clusters through investment, credit, land rent, and other dimensions, restricting the migration of enterprises through policy regulation, environmental regulation, access approval, and other methods. These "push" or "pull" play a regulatory role in the development of enterprises. Together, they constitute the policy environment for enterprises to move in and out.

2.3.3. Interior: Strategy. The enterprise's strategy is essential in the choice of location. The role of internal factors is well known in the literature on relocation. In particular, Sleuwaegen and Pennings [50] found that older companies are more integrated into their spatial environment and therefore show less mobility behaviour. Other empirical studies have also confirmed this characteristic [60]. Generally speaking, the essential strategy of enterprises lies in profitability. The profitability of enterprises promotes the growth of enterprises and finally realizes the promotion of enterprise scale. Company size is another crucial factor affecting relocation costs and organizational tasks, which will affect relocation tendency [59, 61, 62]. In particular, because these problems are significant for large companies, the more the employees, the lower the mobility tendency [11]. At the same time, recent studies have found that enterprise size has an important impact on enterprises' overseas investment. After considering the external financial indicators of the enterprise, we found that the enterprise's decision-making has the characteristics of "personification." For example, previous studies found that the tertiary industry companies, especially commercial services, are more "loose" [51, 61, 63, 64]. The degree of enterprise internal control effectively promotes the perfection of the enterprise decision-making process, especially in the significant behaviour of enterprise migration. According to the signal transmission theory, enterprises' perfect information disclosure will release good signals to the market and promote the popularity of enterprises. Due to government policy, environmental protection regulation, market public opinion supervision, environmental

protection, and social responsibility performance are also considered in the enterprise migration behaviour. At the same time, another enterprise feature that affects the relocation choice is the industry [51]. When the enterprise creates and upgrades, it will tend to the area where innovation factors gather, but when the enterprise's industry concentrates on the industrial chain, it will tend to the developed areas of the supply chain [64]. The strategic decisions of the enterprise for different objectives jointly promote the migration decision-making output of the enterprise. We analyze the game of the enterprise's internal strategy through the explicit indicators of the enterprise and deduce the "push-pull" game process.

2.3.4. Interior: Executive Behaviour. In the traditional research on enterprise migration behaviour, it is considered that enterprise migration is entirely rational. However, in the research process of enterprise migration, Chinese scholars bring the branding theory into the research field of vision and find that the migration behaviour of enterprises has a particular location preference. There is evidence that certain aspects of the living environment, such as cultural and natural facilities [65], make specific locations more attractive to companies. We use the Push-Pull Theory to construct this irrational decision-making process within the enterprise. Specifically, the preference of business owners or decision-making teams for particular locations in enterprises is the pull of enterprise migration.

In contrast, the "strangeness" and maladjustment of business owners or decision-making teams to the current environment are the thrust of enterprise migration. Specifically, this location preference is related to the adventurous spirit of business owners and local complexes. According to the high echelon theory, enterprises are affected by the decision-making behaviour of senior managers [66], which is quantified by the characteristics and background of senior managers [67]. In China, an emerging economy, many business owners and managers leave their original areas to seek higher salaries and more promising development prospects. At the same time, the cultural background of different regions has different effects on managers' behaviour and decision-making, which plays an essential role in China's enterprise migration and investment cases. For example, some managers in Fujian Province of China choose to establish manufacturing factories in their birthplace because they can attract the capital of returned or overseas Chinese with their hometown geographical advantages. This influence is primarily reflected in the executive education experience [68]. At the same time, as the current situation, many managers choose to operate in areas away from their original regions, which is related to the managers' adventurous spirit [69]. At present, the overseas background of executives is widely used to quantify the adventurous spirit of executives [70]. In the nonnative place, the enterprise managers pull enterprise migration out of their attachment to the native environment. In the original place, enterprise managers yearn for a better market environment, resulting in the pull of enterprise migration.

The Push-Pull Theory in two different situations constitutes an implicit expression of the internal migration

choice of the enterprise. We attribute this expression to the "push-pull" interaction between the "adventure spirit" of the enterprise background and the "local complex" of the enterprise background. On the explicit background expression of enterprise internal decision-making, we mainly build a Push-Pull Theory through the "rationality" and "sensibility" of enterprise managers' decision-making to demonstrate the manager's straight game behind the explicit enterprise decision-making. Precisely, executive power will determine the degree of decision-making in the enterprise, which is determined by the executive team, which is very important for the migration behaviour of the enterprise. The excessive power of the top management team will make managers have overconfidence [71], which will have a short-sighted effect when managers make decisions [72], thus affecting rational judgment [73].

The existing research on relocation decision-making of enterprises generally believes that the academic background of executives encourages executives to take more rational considerations in decision-making output. This allows companies to consider market conditions and corporate social value when making relocation decisions rather than rely on personal preference. The interweaving of rationality and perceptual feelings among the senior management makes the management team face the "push and pull" of internal changes when deciding to relocate. At the same time, we consider that executives' political background, overseas background, and education experience all have an important impact on executives' behaviour. We believe that executives and the government of the region where the enterprise is located have a political background, which will create a pull to hinder enterprise migration due to branding theory and rent-seeking behaviour. However, the political background that senior executives do not have with the target location's local government will push the enterprise migration. This game of "push-pull" forces plays moderating effect in enterprise decision-making. We have also fully considered selecting indicators to ensure that they align with reality and academic reality.

3. Establishment of System Dynamics Simulation Model

3.1. Model Conceptualization. The system boundary is determined in the following ways. The system behaviour of system dynamics research is based on the interaction of internal factors of the system [74]. It is assumed that the system behaviour is not affected by the changes in the system's external environment and is not controlled by internal factors of the system. Therefore, the system boundary is to determine which indicators should be taken into account in the model. Within the boundary, all indicators related to the research conceptual models and variables crucial to emotional problems should be considered; on the contrary, those concepts and variables outside the boundary should be excluded from the model. Our boundary is determined as the composition of the above-screened variables.

Based on determining the boundary, we carry out a causal analysis. The research of system dynamics focuses on

the system dynamics of the self-feedback mechanism. To study the feedback structure of the system, we have to first analyze the relationship between the whole and part of the system, tracing the causality and mutual relationship and reconnecting the variables to form a loop. In system dynamics, we often use a causality diagram to show the loop and analyze the factors and events in the enterprise relocation behaviour with various cause-effect diagrams, flow charts, and tree structure analysis diagrams.

For our system, we use the following causal loop to analyze the relationship between various variables. We believe that the variables we select guide the enterprise to generate behaviour through causality. We divide this guidance process into four subsystems, and their relationship is shown in Figure 3.

In the economic subsystem, there is such a relationship. Land, labor, management, transportation, and logistics costs will hinder the development of the industry to which the enterprise belongs. It should be noted that there are many similar cost factors, and we only select some more important ones for representative demonstration. Similarly, rich raw materials, timely information and technology, promising talents, and an open market can promote the enterprise's industry. As a critical element, innovation ability plays a similar role as a catalyst in a regional economy. Therefore, we will build a separate dimension for the relevant variables to promote enterprise innovation, and it will play a moderating effect. The number of colleges and universities, science and technology investment, and education economy in the region-cost input and the number of employees in high-tech industries can play an essential role in the vitality of industrial innovation. At the same time, the innovation industry will be widely concerned for it is closely related to the market public opinion environment. All these factors are significantly associated with the overall economic level of the region. Regional industrial development level and regional economic level of regional inequality are cause and effect. This relationship is shown in Figure 4.

We express this causal logic according to the following formula:

regional industrial development level

- degree of market openness
- → positive market public opinion
- → industrial development assistance
- → regional industrial development level,

industrial development assistance

→ degree of industrial cluster

(1)

- → degree of industrial supporting
- → regional industrial development level
- → degree of market openness
- → favorable market public opinion
- → industrial development assistance.

There is such a relationship with the subsystem of government policies. Due to the outstanding macrocontrol ability of the Chinese government, we pay attention to the policy ability in China. The government will directly impact the production cost of enterprises through land rent preference and tax preference. At the same time, the government will set up an industrial guidance fund. Through credit support, it will affect the technology and finance index of the region, thus affecting the financing cost of enterprises. These measures will be directly reflected indirect or invisible industrial inputs. The result of these industrial inputs is the industrial supporting facilities in the government's location, thus affecting the overall production infrastructure and environment. The government sets negative clearing for enterprises in some industries. It has a poor business environment due to its corruption and rent-seeking, which hinders the improvement of the fair competition environment index. Government administrative efficiency plays a regulatory role in this cause and effect. This relationship is shown in Figure 5.

We describe the causal logic of the policy dimension according to the following formula:

business environment index

- → fair playing field index
- → administrative efficiency
- → the level of improvement of regional policies
- → business environment index,

business environment index

- \rightarrow tax preference (2)
- → government inverstment in industrial parks
- → government industrial supporting facilities

(degree of perfection) → infrastructure index

- → regional policy supporting index
- the level of improvement of regional policies
- → business environment index.

Internally, we also consider the enterprise strategy subsystem. From a financial perspective, enterprise profitability will directly affect enterprise growth. The enterprise growth process is reflected in the enterprise's existing scale, and the enterprise scale supports the enterprise's investment strategy. These investment processes affect the enterprise's spatial distribution strategy, such as the establishment of branches. At the same time, in the capital market, due to the theory of signal transmission, the investment strategy of enterprises also interacts with the popularity of enterprises. The interaction between enterprise internal control and governance and enterprise popularity affects enterprise information disclosure in the explicit social dimension. The existing studies generally believe that enterprises with better information disclosure systems will better fulfil their social responsibilities. In space, on the other hand, corporate behaviour is closely related to social responsibility and social value. This relationship is shown in Figure 6.

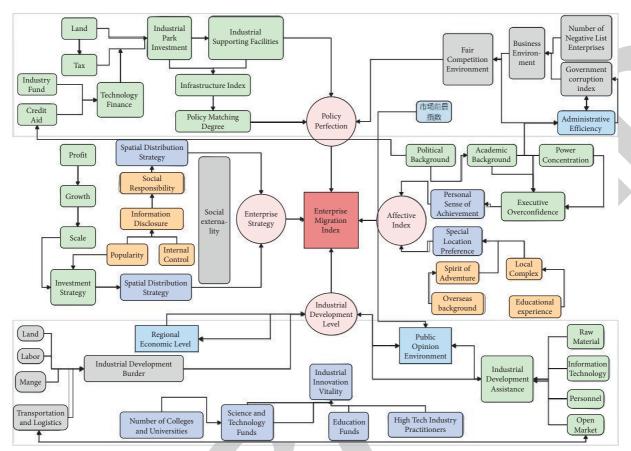


FIGURE 3: Model causality diagram.

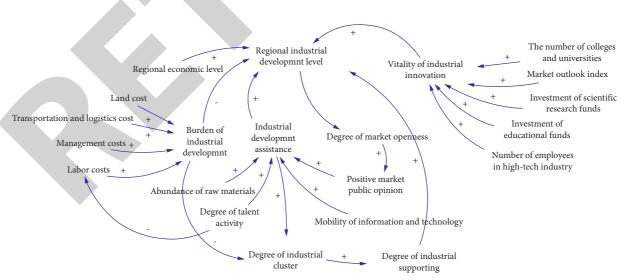


FIGURE 4: Economic factors.

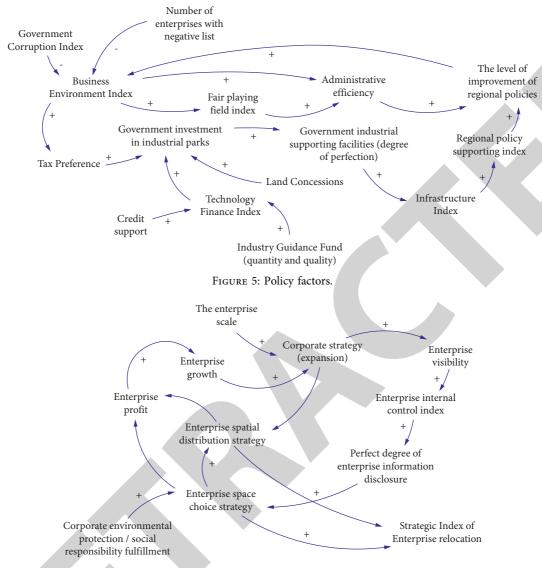


FIGURE 6: Enterprise strategy.

(3)

The internal logic of the enterprise has the following causal relationship:

enterprise growth

- → enterprise strategy (expansion)
- → enterprise visibility
- → enterprise internal control index
- → perfect degree of enterprise information disclosure
- → enterprise spatial choice strategy
- ---- enterprise spatial distribution strategy
- ---- enterprise profit
- → enterprise growth.

After considering the completion of the external subsystem of the enterprise, we analyze the causality of the internal subsystem of the enterprise's migration. The political background of senior executives will affect the land preference and tax preference given to enterprises by the local government. Due to the unique background of Chinese culture, the political background, academic background, and centralized power of senior executives will affect the overconfidence of senior executives. This kind of self-confidence affects executives' sense of personal achievement. At the same time, we also consider the growth background of executives. Executives' overseas background and educational experience will affect their extroversion and willingness to return, thus affecting executives' particular location preferences. This relationship is shown in Figure 7.

The main causal loops are shown in the following formula:

local complex
$$\longrightarrow$$
 adventurous spirit. (4)

Based on this, we constructed the causal circuit diagram as shown in Figure 8.

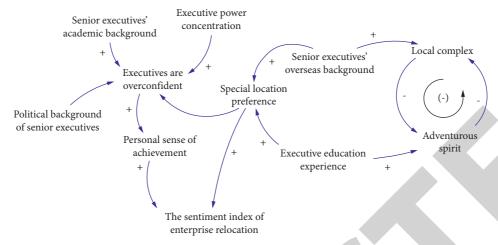


FIGURE 7: Enterprise emotion.

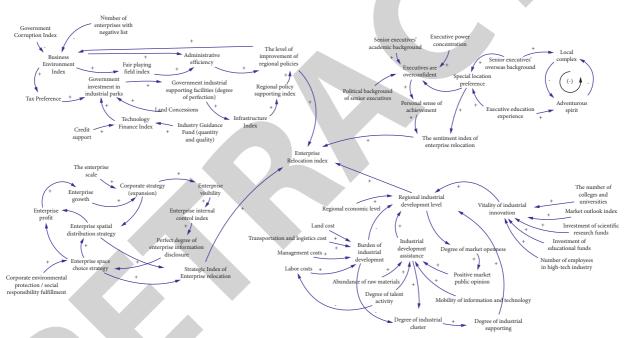


FIGURE 8: Total cause and effect diagram.

3.2. Model Parameterization. There are five kinds of system dynamics equations, namely, horizontal equation (L), rate equation (R), auxiliary equation (a), constant equation (c), and initial value equation (n). The horizontal equation and rate equation are the core of the model.

Horizontal equation (L) is the basic equation of system dynamics; that is,

$$L_{(t)} = L_{(0)} + \int_{0}^{t} \left(\sum R_{in}(t) - \sum R_{out}(t) dt. \right)$$
 (5)

In the dynamic formula, $L_{(t)}$ represents the value of the quantity L in the state at time t. $L_{(0)}$ represents the initial value, and $\sum R_{\rm in}$ (t) represents the input flow of the state variable. $\sum R_{\rm out}$ (t) represents the output stream of the state variable. $\sum R_{\rm in}$ (t) $-\sum R_{\rm out}$ (t) represents the net inflow of the state variable.

The above integral equation shows that the value of the state variable at time *t* is equal to the initial value of the state variable plus the accumulation of net flow change over time. What needs to be explained here is that we mainly consider the characteristics of such variables when setting variables belonging to flow and interface data.

In addition, the rate equation is expressed as a function of state variables and constant.

$$R = f(L, constant).$$
 (6)

The purpose of designing a system flowchart according to the relationship between various factors in the system of enterprise relocation behaviour is to reflect the characteristics and characteristics of different variables that cannot be reflected in the causal relationship of the system. The flow

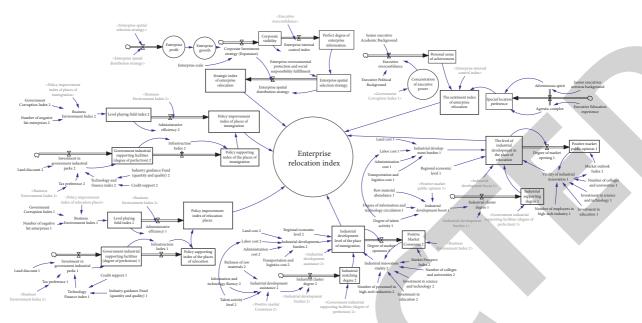


FIGURE 9: Flowgraph.

diagram makes the internal mechanism of the system clearer, further quantifying the variables in the causality diagram and finally realizing the simulation of enterprise relocation behaviour. The flow diagram of the simulation system is shown in Figure 9.

The model successfully passes the conventional system dynamics confidence-building tests using the practical guide provided by Barlas [74]. We also analyze the six enterprises from China through the above model to ensure that our model is in line with reality. These companies have the same characteristics: they have migrated. At the same time, we compared their simulation index with the actual situation and found that this model can better simulate the process of enterprise relocation.

4. Discussion

This part discusses the policies that the government may adopt and their impact and discusses how enterprises can make better development by means of relocation. In addition, we discussed how to use systematic thinking to promote the development of emerging economies. As a supplement, we analyze the possible contributions and shortcomings of this paper. Future research is also planned.

4.1. Government Policy

4.1.1. Government Policy A: Administrative Convenience. In our theory, we systematically consider the government's impact on administrative facilitation given to enterprises. Local governments are easier to attract enterprises to relocate because administrative facilitation such as preferential land rent and credit support is given to firms. The case of Policy A is verified in Case 1. However, the reality is that enterprises often relocate to the local area due to administrative convenience and then relocate out of the area again

due to the low degree of market opening or other policy disadvantages. We contend that other disadvantages in the system offset the attractiveness of administrative convenience for firms in such cases.

The government's effective measures should combine more significant attraction with more vital constraint conditions for enterprises. Specifically, the government can transfer land rights with low added value. For example, the case of Guangdong Province, China, shows that the government transferred the right to develop unexplored islands far from cities to high-tech enterprises. The government has given away land with low value-added. Enterprises have obtained almost zero cost of production land, a win-win situation for both parties. Once the enterprises invest in this place, their desire to relocate is reduced because of sunk costs. Conditional and substantial credit support works equally well, and such policies can reduce the relocation behaviour of enterprises.

4.1.2. Government Policy B: Environmental Regulation. Governments have imposed environmental regulations on high-polluting enterprises within their borders to protect the environment in emerging economies. Such regulations encourage companies to move out and find lower-cost locations for production. For more developed regions, such inlaws and policies can help themselves achieve environmental protection and industrial structure optimization. However, it would be an environmental disaster for the rest of the economy. The whole economy is a dynamically adjusted system. In our theory, such restrictive environmental regulations reduce the openness of regional markets. It will reduce the attractiveness of the business and increase the cost of doing business.

Effective government measures should combine environmental regulation with administrative facilitation. It

promotes its sustainable development while ensuring that the overall utility of the enterprise remains roughly unchanged. To be specific, the government should regulate the pollution emission of enterprises by-laws or policies but, at the same time, provide credit support to enterprises to help them upgrade equipment to achieve sustainable production. This policy can achieve higher efficiency and more sustainable production of enterprises and avoid the relocation of enterprises.

4.1.3. Discussion: Systematically Building Policy Systems for Sustainable Development. Theory suggests that policy alone plays a small role in the circular loop. Changes in other factors often offset it. Due to irrational policies, it sometimes has the opposite effect to that intended by policy settings. Real cases from China validate this view.

Therefore, the systematic construction of the policy system should be emphasized. In the overall system that affects enterprise migration, policies can help enterprises achieve sustainable development in the case of realizing the coordination of multiple policies. This development is not just good for business. It also helps local governments develop sustainable and economic requirements. In reality, such systematic policy system construction requires policymakers to systematically consider the interaction mechanism between various policies and requires that policy implementers engage in systematic policy practices geared toward sustainable development goals.

4.2. Enterprise Strategy

4.2.1. Enterprise Policy A: Market Orientation. When an enterprise is first established, it often does not reasonably estimate its development prospects. This leads to obstacles to market expansion after a certain point of development. This encourages companies to move closer to the market. However, with the increase in informatization, the time lag between enterprise decision-making in emerging economies has decreased. At the same time, with the improvement of infrastructure and the reduction of logistics and transportation costs, the distance from the market is no longer the primary consideration for enterprises to consider when facing the market. However, there is undeniable that enterprises tend to gain more significant market opportunities after relocating to the region close to the market.

Enterprises should also pay attention to the following factors when making market-oriented migration decisions. First, enterprises need to estimate the current location and destination costs reasonably. Such cost estimation should include the direct cost and consider the implicit cost such as corporate reputation and cultural adaptation. All costs will have a comprehensive effect on the enterprise and reduce the development expectation. Second, companies should consider the sustainability of migration destination development. For example, large cities have a high steel demand, but they are more likely to introduce environmental regulations. Then iron and steel enterprises to migrate for this unsustainable production should be estimated.

4.2.2. Enterprise Policy B: The Game between Cost and Innovation. When making migration decisions, enterprises often grapple with low cost or potential innovation. Due to the accumulated advantages of the current location of the enterprise, the production cost of the enterprise is low. However, enterprises have less incentive to innovate products. On the contrary, although the production cost of enterprises in some highly developed cities is higher, the innovation potential of enterprises is higher due to the rich resources and fierce competition. For the current development of enterprises, enterprises may choose the current location to reduce costs. However, enterprises can only achieve sustainable innovation.

Enterprises need to consider many aspects when migrating. In the perfect competitive product market, enterprises focus on innovation to achieve sustainable development. However, the enterprise's product innovation should consider factors such as its current financial status and the vitality of the internal personnel structure of the enterprise. These factors are crucial to the success of an enterprise's innovation. In the oligopoly product market, enterprises can realize market barriers only by cost priority strategy. For example, Coca-Cola's global localization production strategy and cost control strategy have promoted Coca-Cola's monopoly position.

4.2.3. Discussion: Systematic Decision-Making for Sustainable Development. The migration decision of an enterprise has an important systemic connection with the enterprise itself and the external environment of the enterprise. In the process of decision-making, enterprises can adopt systematic thinking to make decisions on behaviour. This kind of systematic decision-making does not only consider factors that affect the enterprise. A reasonable assessment of the company's own conditions should be made to analyze the impact of the interaction of the company's decision-making with external conditions. The impact of this feedback on the company itself should also be considered. In reality, companies often pay too much attention to external factors and neglect their own internal environment. This neglect causes the enterprise to affect the internal structure of the enterprise after its decision-making behaviour, thus causing unsustainable consequences for the enterprise.

Based on the above, companies should systematically think and make decisions when making migration decisions and other major business behaviours. This kind of systematic decision-making requires enterprises to embed themselves in the overall economic system and rationally analyze the impact and secondary impact of decision-making.

4.3. Theoretical Contributions. The possible marginal contributions of this paper in theory and practice mainly include the following two aspects. First, in terms of theoretical innovation, we systematically put forward the Push-Pull Theory for the internal logical motivation of enterprise migration behaviour. We supplement existing research on enterprise migration behaviour from dynamic evolution and factor game theoretical perspectives. In the existing studies,

the promotion and pull of factors are put forward for the migration behaviour of enterprises to a certain extent [75–79]. However, this theory is scattered and analyzed by fewer factors. Therefore, we combine the relatively mature factors affecting enterprises in academia with reality, incorporating the essential decision-making factors into the enterprise migration game and integrating the enterprise migration process into the factor game of the overall macroenvironment. We express it concisely in the form of "push-pull," which is a powerful supplement to the improvement of the theory of enterprise migration. At the same time, in addition to the systematic evolution analysis of the explicit factors of enterprise migration, we also include the internal implicit factors affecting enterprise migration into the research theory for more comprehensive research on enterprise migration.

The above factors have essential research value under the background of the optimal allocation of the global industrial chain and the reindustrialization of developed countries. In practical considerations and concerns, our research provides a theoretical basis for the government and the market to analyze enterprise migration's internal motivation and logical mechanism. This Push-Pull Theory helps the government to optimize the regional industrial layout and enterprises to make reasonable decisions through systematic thinking.

4.4. Practical Implications. The possible practical contributions of this paper are mainly in the following three aspects. First of all, this paper proposes systematic thinking and policy systems for emerging economies that hope to complete economic transformation through enterprise migration. Secondly, this paper puts forward methods and cases of systematic thinking about how companies can achieve sustainable development through migration. Finally, this paper gives realistic cases and systematic countermeasures to the behaviour mechanism of the economic system for microsubjects.

4.5. Future Research Directions. Further research can be carried out from the following two aspects: first, the expansion and improvement of the enterprise migration system, such as adding more dimensions, and second, the relocation behaviour of enterprises in other countries with unique political and economic conditions, which are valuable to study to promote the universality of the system structure.

5. Conclusions

With the development and transformation of emerging economies, many companies are facing an urgent need for migration. Although there are many explanations for corporate migration behaviour in existing studies, they all ignore the systemic reasons and systemic effects of corporate decision-making. This research attempts to explain the behavioural mechanism and impact of corporate migration through systematic thinking.

This paper constructs a Push-Pull theoretical model of the interaction of internal and external factors in the enterprise and finally explains the motivation of the enterprise's migration behaviour. Specifically, the choice of migration behaviour of enterprises is affected by internal and external factors. The influence of these two parts does not act on the strategic decision-making of the enterprise alone but interacts. We define this mechanism as the Push-Pull Theory. We explain the Push-Pull Theory from three aspects: (1) The external environment of the company (economic environment and government regulations) is constantly changing, which promotes the migration or stay of the company. (2) The internal environment of the company (senior management's emotions and management decisionmaking) is constantly changing, which promotes enterprise reform or drives the enterprise to maintain the status quo. (3) The external environment of the enterprise interacts with the internal information, comprehensively promoting the enterprise to make a migration decision or pulling the enterprise to maintain the current business strategy. This paper conceptualizes the theoretical mechanism and summarizes the influencing factors of these three aspects through bibliometric analysis and the actual situation. Besides, it systematizes these factors and explains the causal feedback of the enterprise migration mechanism by constructing a system dynamics model. Furthermore, it discusses the Push-Pull Theory in the real world. Through a systematic and logical analysis of the policy impact of the government and enterprises, we reiterated the importance of systematic thinking in the process of sustainable economic development.

The migration behaviour of enterprises is closely related to the overall economic system. The upgrading of the industrial structure and sustainable development of emerging economies requires not only attention to current resources but also consideration of the overall impact of changes in the location of enterprises. The challenges ahead are huge if we want companies and economies to develop efficiently. This trend requires systematic thinking and practice.

Disclosure

Any errors of omission and/or commission in this version of the paper are the sole responsibility of the authors.

Data Availability

The dataset can be accessed upon request.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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