

The Mechanism of Population Mobility Driving Economic Development from the Perspective of Social Networks

Weikang Guo¹

¹ School of Economics and Management, Guangxi Normal University, China

Correspondence: Weikang Guo, School of Economics and Management, Guangxi Normal University, Guilin, China.

Received: June 25, 2025; Accepted: July 7, 2025; Published: July 9, 2025

Abstract

As a key bridge connecting individuals and opportunities, social networks play a central driving and regulating role in the complex interaction between population mobility and economic development. The purpose of this paper is to systematically review and critically assess the research on population mobility and economic development based on the social network perspective, focusing on how the social network influences mobility decisions, patterns, and ultimate economic effects through the core mechanisms of information dissemination, trust building, resource acquisition, and social support. The study shows that social networks can not only significantly reduce the cost and risk of migration and shape the path of mobility, but also become an important force to promote regional economic development by facilitating knowledge spillover, labour market matching, consumption pattern integration and industrial linkage. At the same time, its potential closure and uneven distribution of resources may also exacerbate regional imbalance and social differentiation. Future research needs to deepen the exploration of the mechanism, pay attention to the heterogeneity and dynamic evolution of the network, and provide more operational insights for policy making.

Keywords: population mobility, economic development, social network

1. Introduction

With the acceleration of globalization and urbanization, population mobility has become a social phenomenon that cannot be ignored. There are various types of population mobility, including temporary job migration, permanent change of residence, and seasonal agricultural labour migration. These flows can be driven by a variety of factors, such as economic opportunities, environmental changes, political stability, social networks and individual preferences. Such mobility not only changes the lifestyles of individuals, but also has far-reaching economic, social, and cultural impacts on both receiving and outgoing places. Due to China's unique geographic, historical and social context, population mobility presents complex and diverse characteristics. The social network perspective provides a unique and powerful analytical framework for understanding its complex mechanisms.

Existing studies have revealed that population mobility patterns are driven by a variety of factors. For example, transport modes, dialectal differences, social networks, and cultural and family ties are closely related to population mobility. The influence of transport modes on population mobility has received much attention, and different modes of transport may lead to different patterns and outcomes of population mobility [1]. Dialect, as an important tool for inter-regional communication, has an important impact on cross-regional population mobility, and dialect has a certain degree of identity, which is important in cross-regional population mobility. These factors not only influence people's migration decisions, but also further shape the economic structure and function of cities [2]. In addition, the impact of population mobility on urban economic development has also been a focus of scholarly attention. On the one hand, population mobility can contribute to economic development by increasing labour supply, facilitating the dissemination of knowledge and skills, and improving the flexibility of the labour market [5]. On the other hand, an increase in the level of economic development can also attract population inflows, especially when an area offers better employment opportunities and living conditions [6]. However, population mobility may also bring challenges, such as pressure on the labour market, increased demand for social services, and cultural conflicts. These issues, in turn, are likely to be major factors affecting the attractiveness and economic vitality of cities. Economic development is also a major concern for areas with population loss [7], which can lead to hollowing out and ageing of the local population, accompanied by a series of social problems such as left-behind children and empty-nesters [8]. Therefore, understanding the interactions between population mobility and

economic development is crucial to formulating effective policies. It is worth noting that population mobility is not only a single socio-economic phenomenon, but it is also closely linked to a number of other areas. For example, rural labour mobility is profoundly linked to the borrowing behaviour and choice of retirement mode of farm households [9]; while migrant entrepreneurs in cities are influenced by their family culture and display unique entrepreneurial characteristics [3]. Despite the importance of these factors, existing research is still lacking in the systematic integration and in-depth analysis of the mediating, moderating, or independent roles played by social networks, as well as the specific micro-mechanisms through which they influence economic development, especially how information, trust, resources, and support operate.

Social network analysis (SNA) provides a key path to break through these limitations. Social networks are not a static *collection of relationships*, but a dynamic resource flow system, whose core functions are: information bridge, which transmits key information such as employment, housing, and policies through informal channels to reduce migration uncertainty [15]; trust carrier, which builds a basis for cooperation based on strong blood and geographic ties, and reduces transaction costs [9]; and trust carrier, which builds a basis for cooperation based on strong blood and geographic ties to reduce transaction costs. relationships to build a basis for cooperation, reducing transaction costs and revealed borrowing dependence; support platforms, which provide material assistance, emotional belonging and institutional buffers in family networks to support entrepreneurship [3]; and structural engines, where network topology (e.g., centrality, structural holes) determines the efficiency of resource allocation and the speed of diffusion of innovations [12]. In the context of population mobility, the social network is both a *catalyst* for migration decisions (e.g., creating path dependence through chain migration) and a *converter* for economic integration (e.g., transforming the social capital of migrants into entrepreneurial capital). Neglecting this perspective, it is difficult to explain why there are geographical differences in the scale of mobility under similar economic conditions, and why some groups are able to make a rapid economic leap while others are trapped in a cycle of poverty.

This paper argues that social networks are the central key to decoding the complex interaction between mobility and economic development. It not only shapes the scale and direction of mobility by lowering the cost of migration, but also transforms the mobility factors (human resources, capital, and information) into economic growth momentum through the functions of resource integration, knowledge spillover, and institutional substitution. At the same time, network closure and structural inequality may exacerbate development imbalances. Based on this, this paper aims to: systematically integrate the research on population mobility and economic development from the perspective of social networks; deeply analyse the process of social networks affecting mobility and economy through the four-pronged mechanisms of information, trust, support, and structure; critically assess the double-sided nature of network effects (promoting efficiency vs. curing segmentation); and propose policy implications and future research directions for inclusive development. The following section first analyses the main pathways through which population mobility affects economic development (Chapter 2), then focuses on the central role of social networks (Chapter 3), and finally summaries the theoretical contributions and looks ahead to the frontiers of research (Chapter 4).

2. The Path of Population Mobility Affecting Economic Development: The Potential Role of Social Networks

2.1 Labour Market

Population mobility significantly affects the structure and function of the labour market. The arrival of migrants can alleviate labour shortages, especially in areas that face ageing populations or labour shortages. At the same time, population mobility may cause changes in wage levels and adjustments in occupational structures, especially in low-skilled labour markets. In addition, population mobility promotes the diversification of skills in the labour force, bringing new skills and expertise to the receiving region, which is crucial for innovation and productivity gains. Labour mobility is an important socio-economic phenomenon that involves the movement and redistribution of people. Labour mobility can bring about many economic and social effects, such as improving the efficiency of resource allocation and driving rural households to increase their income and wealth.

In recent years, with the increase of rural labour mobility in China, studying its impact on farm households has become a focus of attention for academics and policy makers. Based on data from the China Family Tracking Survey (CFPS) from 2014 to 2018, a paper measured the multidimensional relative poverty deprivation scores of rural households from eight dimensions: income, education, health, assets, housing, living standards, social security, and subjective attitudes [7]. It was found that labour mobility can significantly alleviate multidimensional relative poverty of farm households and is robust, regardless of the repatriation of funds from the mobile labour force. In addition, labour mobility can alleviate multidimensional relative poverty among farm households by expanding their social networks and social prestige. However, labour mobility also exacerbates poverty in the

social security and subjective attitude dimensions. Another paper explored the impact of labour mobility on farmers' borrowing behaviour [9]. The results show that labour mobility leads to a significant increase in the likelihood and amount of borrowing by farmers. The mechanism of analysis suggests that incomplete migration of households increases dependence on members who remain in the rural social network, leading farmers to increase borrowing to maintain the social network. Heterogeneity analysis shows that the borrowing effect of labour mobility is greater for households with low income and low human capital.

It is worth noting that the ability of migrants to effectively integrate into the labour market, match to suitable jobs, and gain access to skill upgrading opportunities, as well as changes in their remittance behaviour and social network dependence, are closely related to the size and quality of the social networks they have with their geographic distribution, such as friends and relatives, fellow villagers, and occupational networks. Social network is a key channel for labour market information transfer, job matching and trust building.

2.2 Consumption Patterns

Population mobility changes consumption patterns and market demand. Migrants often bring with them different consumption habits and cultural preferences, and these new consumption needs can stimulate the development and diversification of local economies. For example, migrant groups may increase the demand for specific food products, recreational activities and cultural products, thereby promoting the development of related industries. With population mobility, especially from rural to urban areas, people bring their old consumption habits to their new place of residence and also accept the consumption concepts in the new environment, thus facilitating the integration of consumption habits from different regions [10]. In addition, population mobility is usually accompanied by changes in the labour market, especially migration to more economically developed regions, which often brings higher income levels, thus increasing the consumption capacity of the mobile population.

There are usually more employment opportunities in the areas of population inflow, especially in areas such as services and construction, and the flourishing of these sectors provides more employment options for the mobile population, further contributing to the increase in consumption capacity. However, population mobility may also lead to over-consumption of public resources and increased environmental pressure, which need to be balanced by effective policies and management. The integration of consumption habits and the emergence of new demands among the mobile population are not only affected by income levels, but also deeply influenced by their social circles (social networks). Consumption demonstrations, information sharing and common preferences for specific cultural products among network members are important forces in shaping new consumption patterns.

2.3 Impact of Population Mobility on Industrial Structure

Population mobility has a profound impact on industrial structure. On the one hand, migrants may fill the labour gap in certain industries and promote the development of that industry; on the other hand, they may also bring new business models and technologies, which promote the upgrading and transformation of industries. Rural-urban migration has provided a large number of cheap labour for urban economic development and promoted the development of urban labour-intensive industries [11]. Especially the proportion of young labour and skilled personnel, their joining helps to improve the local labour structure to enhance the overall quality of the labour force, creating the necessary conditions for industrial upgrading. In some cases, population mobility may also lead to the decline of certain industries, especially when migrants tend to engage in informal economic activities.

New business models and technology diffusion brought by migrants often depend on their embedded social networks. Entrepreneurs' industry choice, technology acquisition, market development and even access to finance are closely linked to their social capital [3]. At the same time, filling specific industry gaps also often relies on specific migration networks, such as territorial networks in the construction and domestic service industries.

3. The Core Mechanism and Economic Correlation of Social Networks

3.1 Concept and Characteristics of Social Networks

A social network is a complex web of social relationships formed between individuals or collectives that encompass kinship, friendship, occupational ties, and many other forms of social connections. A social network is more than a simple connective structure; it is rich in social dynamics and individual behavioural patterns [12]. The core properties of social networks include nodes (representing individuals or collectives), edges (representing relational connections between individuals or collectives), and network structure (e.g., density, centrality, and clustering coefficient of the network). Together, these characteristics determine the function and influence of social networks.

Social networks play a crucial role in information dissemination, resource sharing and social support. They not only influence the behavioural patterns of individuals, but also profoundly shape the overall dynamics of society.

For example, in terms of information dissemination, social networks can accelerate the flow of information, enabling it to spread rapidly to all corners of the network in a short period of time. In terms of resource sharing, social networks provide an important way for individuals and collectives to access and utilise resources. In terms of social support, social networks become an important platform for individuals and groups to seek help and support when facing difficulties and challenges.

Using social networks to study population mobility has unique advantages. Social networks can show the spatial and temporal characteristics of population mobility and help us capture the different characteristics of population mobility patterns at different stages, so as to better understand the dynamic process of population mobility. Based on network analysis techniques, we can reveal the degree of association between urban agglomerations and the agglomeration effect between regions, which helps us to understand the spatial organisational characteristics of urban agglomerations and the interrelationships between them in a deeper way. Population flow network is an important carrier of information flow, capital flow and technology flow, which carries the key elements of economic development. Therefore, revealing the characteristics of the population flow network can not only help us better grasp the operating law of economic development, but also provide powerful support for us to formulate more scientific and reasonable population policies and regional development strategies.

3.2 The Influence Mechanism of Social Network on Population Mobility

Social networks have a wide range of impacts on population mobility through a variety of complex and profound mechanisms. The information transmission mechanism plays a crucial role in this process. Through social channels, verbal communication among friends and relatives, and modern means of communication, it enables potential migrants to obtain detailed information about the destination, covering key factors such as the abundance of employment opportunities, the quality of housing conditions, and the cost of living. This access to information is critical to the decision to move, helping migrants to assess the attractiveness of a destination and thus make more informed choices. The mechanism of social capital is also an important factor influencing population mobility. Social capital, i.e., the practical support and resources that individuals can access through their social network relationships, plays a significant role in reducing the risks and costs involved in the migration process. These supports and resources, which may include financial assistance, employment referrals, housing information, etc., can significantly reduce the economic and psychological burdens of migrants and increase the likelihood of successful migration. The mechanism of homogeneous preferences also plays a non-negligible role in population mobility. People often tend to migrate to places where people with similar socio-economic characteristics to themselves are located, and this preference may stem from the search for a familiar environment and culture, as well as the pursuit of social identity and a sense of belonging. The homogeneous preference mechanism not only influences the choice of migration destination, but also shapes, to some extent, the social structure and community characteristics after migration.

As a complex social phenomenon, China's cross-provincial population mobility involves the cross-study of many disciplines, including social, economic, and geographic. In recent years, with the rapid development of big data technology, researchers have begun to have richer and more diverse data sources to explore this field. Census data, migration data, traffic data, etc., have all become an important basis for constructing population mobility networks. Using these data, researchers have adopted advanced methods such as social network analysis and structural gravity modelling to conduct in-depth and detailed studies on the patterns and paths of population mobility and the influence mechanisms behind them. A study based on data from the national census and 1% sample survey since 1990 conducted a comprehensive exploration of the population mobility network between 1991 and 2018 using social network analysis methods [13]. This study not only reveals the evolutionary characteristics of the population mobility network over time, but also delves into the influencing mechanisms behind it, providing new perspectives and insights into understanding the complex logical links between population mobility and balanced regional development. Another study further embeds migrants' taste preferences into a structural gravity model and quantitatively discusses how bilateral migration affects interprovincial trade through the taste channel [4]. This innovative research perspective reveals the important role of domestic migration in facilitating interprovincial trade and market integration, providing strong evidence for our understanding of the far-reaching impact of population mobility on economic activities. In addition, a study constructed a population exchange network based on Tencent migratory population movement big data, and used social network analysis and GIS spatial analysis to conduct a comparative study of the population change network between cities with different modes of transport [1]. The results show that an integrated transport system can greatly improve the operational efficiency of the population movement network. Another study analysed the characteristics of the daily population movement network in the Nanjing metropolitan area, and used the QAP regression model to analyse the influencing factors of the daily population movement network [14]. Using data from the 2017 National Mobile Population Dynamic

Monitoring Survey, a study investigated the spatial structural characteristics of inter-city population mobility in China using social network analysis [2]. The study found that dialect distance and hometown networks have a significant impact on micro-mobility decisions.

3.3 Analysis of the Association Between Social Networks and Economic Development

There is an inseparable and close connection between social network and economic development. As an important social structure, social networks play a key role in facilitating the exchange of knowledge and the diffusion of technology, which not only accelerates the pace of innovation, but also provides a continuous impetus for economic growth. Knowledge sharing and technology diffusion enable new ideas and solutions to spread rapidly through social networks, thereby promoting technological progress and industrial upgrading throughout society. In addition, social networks provide a stable and productive environment for economic activities by enhancing community cohesion and trust. Within the community, close social ties and mutual trust promote the formation of effective cooperation and coordination mechanisms, which enable economic activities to proceed more smoothly, reduce transaction costs and improve market efficiency. At the same time, such cooperation and coordination mechanisms also contribute to the enhancement of social well-being by ensuring the rational allocation of resources and the realisation of the public interest. However, despite its positive role in economic development and social stability, social networks may also have some negative effects. For example, a social network that is too tightly knit may limit the integration of foreign populations, leading to social closure and xenophobia. In addition, if resources and power in a social network are unevenly distributed, it may also exacerbate social inequality, benefiting some and harming others. Therefore, understanding the relationship between social networks and economic development is important for developing inclusive growth strategies and promoting social stability.

Based on data from the 2017 China Migration Dynamics Survey, a paper explored the impact of family culture on the entrepreneurial choices of migrant workers in China [3]. The study found that family culture significantly contributes to the entrepreneurial choices made by migrant workers. This influence was realised through the formation of hometown social networks and social trust. Further research also found that family culture promotes survival-oriented entrepreneurial choices among migrant workers, but has unfavourable entrepreneurial effects on opportunity-oriented entrepreneurs. In addition, the urban formal system can substitute the effect of family culture on entrepreneurship. In a study of urban networks in Liaoning Province, researchers explored the effects of urban network externalities and agglomeration externalities on economic spillovers under different perspectives of proximity [5]. The results of the study show that when these two externalities work together, they have a more significant effect on urban economic spillovers than either one alone. Specifically, from the perspective of geographic and informational proximity, the interaction of these two externalities actually inhibits urban economic spillovers. In contrast, under the social proximity perspective, this interaction promotes urban economic spillovers. It is worth noting that due to the large differences in the size and control capacity of cities in Liaoning province, it is difficult for the province's urban network as a whole to achieve positive economic spillover effects. However, population mobility under conditions of social proximity has been shown to be effective in promoting economic spillovers. By reducing factor mobility costs, reconfiguring market connectivity, and providing informal institutional support, social networks have become the core transmission hubs for population mobility-driven economic development. However, their economic effects are not naturally universal: open, bridging networks (e.g. cross-border professional associations, diverse immigrant communities) are more likely to stimulate innovation and promote integration, while closed, bonded networks (e.g. exclusive hometown associations, family monopolies) may solidify segmentation and inhibit competition. It is important to guide networks from "closed protection" to "open connection" through institutional development (e.g., public information platforms, anti-discrimination regulations) to unleash their potential for inclusive growth.

4. Conclusion

This review provides a comprehensive and in-depth examination of the complex and multidimensional relationship between population mobility and economic development, with particular emphasis on the central role of social networks in this dynamic interaction. Through a comprehensive analysis of existing studies, we find that population mobility is not only a simple geographic relocation phenomenon, but also profoundly changes the structure of the labour market, reshapes the consumption pattern, and promotes the transformation and upgrading of the industrial structure, thus exerting a significant and far-reaching impact on economic development. At the same time, regional differences in the level of economic development, as a strong driving force, in turn further aggravate the trend of population mobility, forming a two-way interactive relationship between population mobility and economic development. Within the framework of this interaction, the importance of social networks as a key perspective cannot be ignored. As a bridge connecting individuals with various economic opportunities, social networks not only influence the direction and scale of population mobility, but also determine to a large

extent the economic integration and social adaptability of the mobile population. Specifically, through the multiple functions of information dissemination, resource sharing and social support, social networks provide an important way for individuals to obtain employment information, learn new skills, obtain financial assistance and establish social connections, thus helping them to cope with the changes in the economic environment more effectively and realise their personal economic goals and social promotion. Future research could build on this foundation by exploring the specific mechanisms by which social networks play a role in the relationship between population mobility and economic development, and in particular how to refine the specific effects of different dimensions of social networks (e.g., strength, diversity, trust, etc.) on mobility decisions and economic outcomes. In addition, the study should also focus on how to harness and optimise the power of social networks to design more scientific and rational policies on population mobility and economic development, so as to promote balanced regional economic development and effective allocation of population resources. Taking into account the diversity of geographical and cultural backgrounds, the study should also be extended to analyse the differences in the impact of social networks on population mobility and economic development in different geographical regions and cultural environments. This will help us understand more comprehensively the boundary conditions and context-specificity of the role of social networks, and provide a solid theoretical basis and practical guidance for the government and relevant organisations to formulate more precise and effective policies. Through such an in-depth study, we can better grasp the dynamic balance between population mobility and economic development, and promote the sustainable development of society.

References

- [1] Guo, W., Zhong, Y., & Li, W. (2023). Comparative study on population mobility networks between Chinese cities based on different modes of transportation. *World Geographic Research*, 32(07), 102–112.
- [2] Wang, Q., & Zhang, N. (2022). Dialect distance, hometown network, and cross city mobility. *Nankai Economic Research*, (03), 98–120.
- [3] Sheng, Y., Shang, J., & Zheng, H. (2023). The influence of clan culture on urban entrepreneurship of floating population. *Population Research*, 47(04), 114–128.
- [4] Zhang, P., & Han, T. (2023). My people, my homeland: Migration and inter-provincial trade in China. *World Economy*, 46(02), 31–55.
- [5] Tan, S., Wei, Y., & Li, X. (2022). The impact of urban network externalities and agglomeration externalities on urban economy from different neighborhood perspectives: A case study of Liaoning Province's urban network. *Geographical Research*, 41(09), 2404–2417.
- [6] Li, Z., Wang, J., & Wang, W. (2022). The evolutionary characteristics and driving factors of the spatial pattern of inter-provincial rural labor mobility in China. *World Geographic Research*, 1–15.
- [7] Wang, Z., & Yu, J. (2023). Research on the impact of labor mobility on multidimensional relative poverty of farmers. *Northwest Population*, 44(04), 1–15.
- [8] Hu, J., & Li, W. (2023). Rural labor mobility and preference for elderly care models: Impact, mechanism, and group differences. *Rural Economy*, (05), 134–144.
- [9] Yin, Z., Liu, T., & Zhang, Y. (2021). How labor mobility affects farmers' borrowing: An analysis based on social networks. *World Economy*, 44(12), 131–154.
- [10] Zhou, X., & Wu, Y. (2024). Drip or siphon: A study on the consumption relationship between floating population and urban population. *Journal of Sun Yat-sen University (Social Sciences Edition)*, 64(02), 55–66.
- [11] Cheng, Y., Li, J., & Liu, K. (2024). The network evolution, mechanism and urbanization effect of inter-provincial population mobility in China. *Urban Development Research*, 31(06), 98–108.
- [12] Freeman, L. C. (1977). A set of measures of centrality based on betweenness. *Sociometry*, 35–41.
- [13] Zeng, Y., Zhong, Z., & Liu, H. (2023). From the perspective of network, the transition of China's inter-provincial population mobility pattern and its driving mechanism: 1991–2020. *China's Population, Resources and Environment*, 33(03), 160–170.
- [14] Huang, Z., Zhen, F., & Xi, G. (2023). Characteristics and influencing factors of daily population mobility network structure in the Nanjing metropolitan area. *Human Geography*, 38(04), 112–120.
- [15] Granovetter, M. (1973). The strength of weak ties. *American Journal of Sociology*, 78, 1360–1380.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).