Residence Decision, Settlement Intention and Social Integration: An Empirical Study Based on Floating Population in Urban and Rural Areas

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(ii) **Abstract：**
Accelerating social integration of floating population is an important issue in urbanization. Based on the data from the dynamic monitoring on migrant population in 2013, this paper demonstrates a two-way mechanism in the process of urbanization from the individual perspective: the backwash effect of the area of endowment and the merging effect of the area of destination. The results show that the endowment of registered residence accounts for 1-1.5% of the backwash effect of drifting population, and the merging effect of the area of destination is 5-21%, 4%, 9% and 40% in economical, institutional, social and psychological aspects respectively. Meanwhile, there are differences between the two effects on the residence or settlement intention of floating population: residency decisions are more dependent on economic factors, while settlement decisions are mainly dictated by institutional and social factors. To speed up the social integration in new urbanization, social and psychological integration should be enhanced by promoting equalization of public services and encouraging fairness in social and community governance.

(iii) **Key words:**
Floating population; Backwash effect; Merging effect; Residence decision; Settlement intention

JEL: J18

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I. Introduction

China has enjoyed the fastest growing urbanization in the world over the past 15 years, and its urbanization rate has increased by 1.5 times, rising rapidly from 36.2% in 2000 to 56.1% in 2015. [1]A large-scale migrant population (mainly rural workers) has flowed into cities, becoming the main driving force of China's economic development. China's urbanization process, as an important driving force for narrowing the gap as well as promoting the coordinated development between urban and rural areas, will enter a crucial period in the 5-10 years in coming. It is explicitly stated in the *"Outline of the 13th Five-Year Plan"* that one of the major goals of China's economic and social development by 2020 will be "a marked improvement in the quality of urbanization and an acceleration in the urbanization rate of the registered population; the urbanization rate of permanent residents will reach 60%; and we will encourage the agricultural population to settle down in cities and promote the integration of more population into cities and towns. The new urbanization development strategy proposed by the Party Central Committee means that we will accelerate the transformation from the speed-oriented urbanization to the quality-oriented one and from binary development in urban and rural areas to the integrated one.

It is noteworthy that the new generation of migrant workers has become the main force of the current floating population, accounting for 46.6% of the total migrant workers (NBS, 2014)[2]. They have significantly different educational level, social

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[1] *"Proposals on Formulating the Tenth Five-Year Plan for National Economic and Social Development (Guidance Book)"*, People's Publishing House, 2015, p. 72.

[2] The new generation of migrant workers refers to the rural residents born after 1980 and under non-agricultural employment in a place other than their hometown. People.com.cn: "One third of

background and willingness to live compared with the last generation, and they have a stronger tendency of "assimilability" with the city of destination, especially in values, social mentality, social patterns and other aspects. The degree of integration in the area of destination will become a key variable that determines the success of the new urbanization. According to the assimilation theory, the floating population in this period has basically got rid of the identities of their place of origin and preferred the social identities of the area of destination, which is conducive to their upward integration and the promotion of personal socio-economic status as well as regional development. On the other hand, once they cannot merge into the mainstream environment of area of destination, they will fall into the bottom of the city. They will not only be incapable of making economic contributions to the area of destination, but will also become socially disadvantaged in the mainstream society and bring many social problems, thus becoming an important cost for urbanization.

In general, the current barriers to the integration of urban and rural migrants can boil down to the following aspects: Firstly, institutional barriers manifested in the household registration management system and the exclusive policies against floating population in public services and social welfare; [3] secondly, economic barriers, including both the income and consumption gap between urban and rural residents and the opportunity cost that the agricultural population needs to pay by giving up the "three rights" for rural residents, [4] which will weaken the intention of settlement and residence among the migrant population; [5] thirdly, social barriers are caused when migrant population is kept out of the social communication system of urban residents since most of them have a low level of education and work in the secondary labor market, with their living and working environment relatively solidified; and [6] fourthly, psychological barriers, namely, a kind of rural-urban psychological exclusion caused by China's binary system of rural and urban areas. Especially, urban-rural migrants have a low degree of psychological identity and sense of belonging because they do not have the same household registration status or social welfare as urban residents, so it is hard for them to merge into the local community. [7] At present, as China is in the middle of the new urbanization, we should take into account of the economic, social and psychological barriers when analyzing the barriers to the integration of migrant population. This is of great significance in further understanding the obstacles to the integration of rural labor as well as the key factors that influence their willingness to stay or settle down.

the new generation of migrant workers have a diploma of high school or above" by NBS, http://news.xinhuanet.com/politics/2014-05/13/c_126493247.htm?prongongation=1, visited on March 5, 2017.

[3] Lu Jiehua, Huang Kuangshi, *"On the Construction of a Welfare Security Policy System for Migrant Population"*, People's Forum, vol. 11, 2013.

[4] It refers to the rural collective land ownership and the use rights of homestead and collective construction land.

[5] Zhong Shuiying, Li Chunxiang, *"The Theoretical Explanation of the Population Mobility in Urban and Rural Areas: The Perspective of Rural Population Withdrawal - Revision of the Todaro Model"*, Population Research, no.6, 2015.

[6] Zhang Jianli, Li Xiuming, Zhang Li, *"A Study on the Citizenizattion Process and Spatial Differentiation among the New Generation of Migrant Workers"*, China Population Resources and Environment, no.3, 2011.

[7] Yang Juhua, Zhang Jiaojiao, *"Human Capital and Social Integration of Floating Population"*, Population Studies, No. 4, 2016.

Based on the existing literature, this paper tries to do an empirical analysis of the effects of the degree of integration of the area of destination on the settlement or residence intention of floating population so that the impact of various integration factors on the level of China's urbanization can be measured. Based on the data from the dynamic monitoring on floating population implemented by the National Health and Family Planning Commission in 2013, this paper tries to explore the impact mechanism and effects of several major factors of social integration such as economic integration, institutional integration, social relationship integration, psychological integration and endowment of registered residence on the degree of integration in China's urbanization.

Compared with previous studies, the contributions of this paper are mainly in the following two aspects. Firstly, this paper examines the residence or settlement intention of floating population not only from the perspective of integration as found in traditional researches but also from the perspective of non-integration (endowment of the area of destination). Secondly, most of the researches on the willingness of integration among floating population in the academic circle focus on exploring the theoretical mechanism and the integration indicator. They have rarely measured the integration mechanism from multiple channels such as society, individual, governance system and endowment. Hence, this paper attempts to reduce the dimensions of various variables that represent social integration, reduce the endogeneity of the research, and improve the quality of empirical research.

II. Theoretical Analysis and Research Hypotheses

The studies on the path mechanism of the residence or settlement intention among migrant population in academia are mainly influenced by the classical push-pull model of Donald Borg and Everett Lee at the end of the 19th century. Based on the hypothesis of economic dualization, these studies emphasize the decisive role of the "pushing force" in the area of origin and the "pulling force" in the area of destination on population migration and residence decisions from economic aspects. However, the Western classical theory cannot fully explain the differentiated impact of the backwash effect of the area of origin and the merging effect of the area of destination on the residence or settlement decisions among urban-rural migrants as found in China's unique economic structure and social security system.

1. The backwash effect of the endowment of the area of origin

Influenced by the classical push-pull model, a large number of studies have made the "pushing force" in the area of origin and the "pulling force" in the area of destination as the basic framework for analyzing the reasons for population mobility. Both the neo-classical school of economics and the school of new relocation economics believe that the negative factors in the area of origin, including unemployment and semi-unemployment caused by slow agricultural development, poor natural environment and living environment, and low economic income, will serve as the pushing force and push local residents out of the area of origin, while the positive factors in the area of destination, such as employment opportunities and opportunities for development, higher remuneration for employment or "expected income", better cultural facilities and traffic conditions, and improved social status in the future will motivate individuals or families to move in. [8] The migration network

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[8] MP Todaro, *"A Model of Labor Migration and Urban Unemployment in Less Developed Countries",* American Economic Review , vol. 59, no. 1,1969, pp.138-148.

theory emphasizes the important role of the migration network in the area of destination and its implicit social capital and support stock in driving immigration[9].

In recent years, the domestic research on the integration of floating population has begun to relax the hypothesis that integration into the city is the ultimate goal and focuses on the area of origin of migrant population, rather than emphasizing the pulling force of urban communities as proposed by the Western "assimilation theory". Zhu Yu and Yu Li et al studied the intergenerational differences in the settlement intention of floating population in urban areas. They thought that the new generation of floating population in cities and towns generally showed the same characteristics in their settlement intention as the first generation of floating population, and no fundamental change in settlement in urban areas occurred. [10] The reasons for population backflow in urban and rural areas are mainly land conditions and home contact. [11]In addition, some scholars further pointed out that "family endowment" is the key for rural labor to make decisions on relocation, including human capital, economic capital and social capital. Under the current circumstance where cities cannot provide long-term protection to migrants, rural family endowment is the main reason for the backflow or reciprocal transfer of labor. [12]Shizhi Lei and Yang Yunyan further proposed that the probability of backwash among migrants showed an inverted "U"-shape relationship with the family's human capital and natural capital. [13]Nie Wei and Wang Xiaolu found through the CGSS2010 data that various types of family endowment factors have different impact on farmers' willingness to settle in cities and towns. Economic capital such as household income and proportion of non-agricultural income has a positive effect, while the family's housing area and natural capital have an inhibitory effect[14].

Therefore, we propose the first theoretical hypothesis explaining the settlement intention of floating population:

Hypothesis 1: The endowment of registered residence will have an inhibitory effect on the willingness to settle in cities among urban-rural migrants.

2. The differentiated effect of integration of the area of destination

Usually, the academia pays more attention to whether the floating population can smoothly merge into the urban society and what the ultimate outcome of integration is. Since the middle of the 20th century, the research in the integration of migrant population has gradually shifted its attention from the convergence of integration to the analysis of divergence, trying to find out why some migrants can achieve upward integration in the area of destination, while some merely fall into the bottom of

[9] Douglas Massey, *"Social Structure, Household Strategies, and the Cumulative Causation of Migration"*, Population Index, vol. 56, no.1, 1990, pp.3–26.

[10] Zhu Yu, Yu Li, Lin Liyue, Dong Jiexia, *"Intergenerational Continuation and Changes of the Two Generation of Floating Population in the Intention of Settlement in Urban Areas"*, Human Geography, no. 3, 2012.

[11] Meng Zhaomin, Wu Ruijun, *"A Study on Residence Intention of Urban Floating Population - Based on the Survey and Analysis of Shanghai, Suzhou and Other Places"*, Population and Development, no.3, 2011.

[12] Shizhi Lei, Yi Chengdong, *"Long-term Protection, Return On Investment and Backwash Decisions of Migrant Labor"*, Economic Review, no.3, 2013.

[13] Shi Zhi Lei, Yang Yunyan, "Family Endowment, Family Decision-making and Backwash of Rural Migrant Workers", Sociological Studies, no.3, 2012.

[14] Nie Wei, Wang Xiaolu, *"Human Capital, Family Endowment and Farmers' Willingness to Settle in Cities"*, Journal of Nanjing Agricultural University: Social Sciences Edition, 2014 (5).

society.

The labor market segmentation theory explains the results of differentiation starting from the internal characteristics of urban industrial sectors. The segmented assimilation theory holding that the characteristics of migrant groups, such as cultural backgrounds, status and structures, will lead to different degrees of integration and thus different integration outcomes. [15]The "actor-structure model" believes that the integration process of migrants is the combined result of various factors at three levels: individuals, migrant groups and the society; and specific social mechanisms and institutional arrangements will have a significant impact on the integration outcomes of migrant individuals and groups[16].

Empirically, the studies on the integration of floating population in China mainly examine the differences of social integration and its important impact on the results of social integration (such as settlement and residence intention) from different stages of urbanization. Ma Xiheng and Tong Xing divided the process of social integration of new migrants into three phases: "binary community", "promoting friendly relations with others" and "homogenous identity", which will contribute to the differences in institutional, social and cultural integration, thus affecting the floating population's residence and settlement intentions. [17]Ye Juntao et al proposed that urban integration of rural migrant workers would undergo three stages, namely, economic survival, social interaction and psychological identity. Currently, the urban integration of migrant workers remains in the stage of economic survival, which greatly hinders their intention to stay. [18]Yang Juhua paid more attention to decomposing social integration into four aspects: economic integration, cultural acceptance, behavior adaptation and identity. The strength of integration in these aspects leads to four integration results among floating population, which is, isolation, diversity, integration and selected integration[19].

Therefore, we put forward the second theoretical hypothesis explaining the settlement intention of floating population:

Hypothesis 2: Differences in social integration will have a significant impact on the willingness of urban and rural migrants to settle in.

III.   Research Design
1. Sample selection and data source
The data used in this paper come from the dynamic monitoring and survey on floating population organized and implemented by the National Health and Family Planning Commission in 2013. A special survey on social integration of migrant population was conducted in Songjiang District of Shanghai, Suzhou, Wuxi, Wuhan, Changsha, Xi'an, Quanzhou and Xianyang. The respondents including the migrants

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[15] Yue Zhongshan, Li Shuzhuo, Feldman, *"Concept Construction and Empirical Analysis of Migrant Workers' Social Integration"*, Contemporary Economic Science, no.1, 2012.

[16] Liu Cheng, *"Rational Actions and Their Limits - A Qualitative Study on the Process of Urban Integration of the New Generation of Migrant Workers"*, Social Sciences, no.2, 2015.

[17] Ma Xiheng, Tong Xing, *"Improving Friendly Relations with Others: The Road to Social Inclusion among Urban New Immigrants - A Case Study of Community Y in Shanghai"*, Xuehai, no.2, 2008.

[18] Ye Juntao, Qian Wenrong, Mi Songhua, *"Urban Integration Path of Migrant Workers and Its Influencing Factors"*, Zhejiang Social Sciences, no.4, 2014.

[19] Yang Juhua, *"From Isolation, Selected Integration to Integration: Theoretical Considerations on the Problem of Social Integration of Floating Population"*, Population Research, no.1, 2009.

who had started to live in these areas one month prior to the survey, didn't have registered residence of these areas (county or city) and aged 15-59 by May 2013. In this paper, the sample box is determined by hierarchical and multi-stage PPS. Since the research object is urban-rural migrants, the sample size for statistical analysis is 12,538 after excluding the samples with non-agricultural household registration.

2. Selection of variables

This paper mainly examines the impact of different endowments of registered residence and social integration on the settlement or residence intention among floating population. To this end, the empirical model uses residence and settlement intention respectively as the variables being explained and includes the following kernel variables being explained: endowment of registered residence and social integration, including the following four dimensions—economic, institutional, social relationship and psychological integration in the area of destination.

3.2.1 Variables being explained

As can be seen from the descriptive statistics in Table 1, the migrants who choose to settle down and stay do not completely overlap with each other; the overall willingness of settling down is not strong at all; and just over half of those individuals (51.7%, 6,488 persons) are willing to settle down. Among those individuals who choose to become long-term residents (6,630 persons), only 71.1% (4,720 persons) are willing to transfer their registered residence into the area. In other words, 30% to 50% of the floating population are more willing to retain their registered residence in the area of origin. They merely regard the area of destination as the place of temporary employment, leaving at any time when there are better opportunities elsewhere or failing to fully merge into the area of destination. As a result, they have no choice but to move between the area of origin and the area of destination.

Table 1 Settlement and residence intentions among urban-rural migrants

		Settlement Intention		Total
		Yes	No	
Residence Intention	Yes	4720	1910	6630
	No	1768	4140	5908
Total		6488	6050	12538

2.   Kernel variables being explained

(1)Endowment of registered residence (the area of origin)

At present, there is a lack of research in the backwash effect brought by the endowment factors of the area of origin, which has not yet been fully developed at the empirical level. However, it is generally accepted that the endowment of registered residence mainly includes the economic capital, natural capital and social capital of migrant individuals and their families[20][21].

In order to compare the backwash effect brought by the endowment of registered

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[20] Xia Xianli, Yao Zhifu, Li Yao, He Qiang, *"Analysis on Determinants of the Intention for the New Generation of Migrant Workers to Settle in Cities"*, Journal of Population Studies, no.4, 2012.
[21] Yu Zhixin, *"A Comparative Study on Influencing Factors of Residence Willingness of Floating Population by Areas"*, Population and Economy, no.4, 2013.

residence with the pulling effect of social integration in the area of destination, the land and housing area of migrant population is selected in this study as the kernel variable that registers the natural capital and capital; and the social security conditions in the area of origin are used to measure the endowment of economic and social capital in the area of origin.

(2)Social integration of the area of destination

In choosing variables of social integration, scholars at home and abroad agree that: Firstly, social integration is a multi-dimensional concept, which needs to be measured from economic, cultural, social, psychological and cognitive perspectives; secondly, the construction of social integration variables include both subjective and objective, individual and social dimensions. But specifically, there are big differences among different scholars in their choice of specific indicators in each dimension.

Including the dimensions of economic integration, institutional integration, social relationship integration and psychological integration in our framework, we choose the following variables as the indicators to measure the degree of social integration: (a) in economic integration, we select the sources of individual income and housing as the key variables; (b) in institutional integration, we select urban endowment insurance, urban medical insurance and residence permit as the variables; (c) in social relationship integration, we select the number of accompanying family members, the composition of neighbors, community and social participation as well as social interaction in the area of destination as the variables; and (d) the dimension of psychological integration includes two variables: identity and psychological distance. Limited by the questionnaire information and to avoid over-identification and reverse causation in the model that may be caused by adding the variables both in the area of origin and destination, we only retain the social relations and psychological variables of the area of destination. Table 2 shows the specific variables.

Table 2 Descriptive statistics of the sample characteristic variables[22]

Variables			Observed Value	Mean Value	Standard Deviation	Minimum Value	Maximum Value
Explained Variables		Settlement intention	12538	0.517	0.500	0	1
		Residence intention	12538	0.529	0.499	0	1
Kernel Explained Variables	Endowment of the area of origin (registered residence)	Farmland (mu)	12538	4.762	12.21	0	603
		Housing area (m^2)	12538	168.9	92.74	0	900
		New rural cooperative medical system	12538	0.726	0.446	0	1
		New rural social pension insurance	12538	0.263	0.440	0	1
	Social integration in the area of destination	Income (logarithm)	12538	7.997	0.467	6.215	10.52
		Housing source (government)*	12538	0.006	0.079	0	1
		Housing source (unit)	12538	0.245	0.430	0	1
		Housing source (self-owned)	12538	0.061	0.239	0	1

[22] Note: * is a multi-value classification variable. Among them, "housing source" includes market rental, government renting, provided by the employer, self-owned housing and other. When set the dummy variables, we take market rental as a reference group; "identity" is divided into "locals", "persons of the area of origin (hometown)"and "unknown", with "persons of the area of origin (hometown)" as the reference group. In education we take primary school and below as a reference group. In age, we take those aged below 15-24 as a reference group. In "occupation", we take "commercial and service employees" as a reference group. The "range of mobility" includes "cross-provincial mobility, "inter-provincial mobility" and "inter-county mobility, with "cross-provincial mobility" as a reference group. In terms of "the area of destination", we take Shanghai as a reference group. * * For the purposes of calculating numerical variables, the variable of "social interaction" are the weighted calculation of the individual interaction groups, including "relatives working together", "fellow villagers working together", "relatives with local registered residence", "other friends working together", "colleagues with local registered residence" and "local classmates and friends". Under the group, 1 point for "yes" and 0 point for "no". In this paper, we set different weights for each category of people and calculate the total score of social interaction. The larger the value, the more social interaction the individual has in the area of destination. In terms of the variable of "community variables", 1 point for participation in cultural and sports activities, social welfare activities, election activities, evaluation activities, business activities and neighborhood management activities in the community, participate in the total score of 1 points, and the total score is the sum of the scores for each activity (max: 6; min: 0). The variable of "psychological distance" is obtained through the attitude scale, including "I would like to be a neighbor to the locals", "I have a sense of belonging to the cities where I live", "I think locals would like me to be one of them", and "I feel local people do not like / despise outsiders". We assign 1, 2, 3, 4 (points) for "totally disagree", "disagree", "basically agree" and "completely agree", respectively, and use the average score as the measurement of psychological distance. Other variables are binary variables except for the numerical variables.

		Housing source (other)	12538	0.018	0.133	0	1
	Institutional integration in the area of destination	Residence permit	12538	0.425	0.494	0	1
		Endowment insurance	12538	0.223	0.416	0	1
		Medical insurance	12538	0.250	0.433	0	1
	Social integration in the area of destination	The number of accompanying family members	12538	1.418	1.104	0	8
		Social interaction**	12538	4.334	3.769	0	23.15
		Local neighbors	12538	0.534	0.499	0	1
		Community activities**	12538	0.459	0.864	0	6
	Psychological integration in the area of destination	Identity (local)*	12538	0.463	0.499	0	1
		Identity (unknown)	12538	0.030	0.169	0	1
		Psychological distance**	12538	3.294	0.450	1	4
Control Variables	Demographic characteristics	Male	12538	0.571	0.495	0	1
		Educational background (middle school)*	12538	0.566	0.496	0	1
		Educational background (high school)	12538	0.246	0.431	0	1
		Educational background (junior college)	12538	0.051	0.219	0	1
		Educational background (undergraduate and above)	12538	0.012	0.111	0	1
		Age (25-34)*	12538	0.373	0.484	0	1
		Age (35-44)	12538	0.314	0.464	0	1
		Age (45-54)	12538	0.108	0.310	0	1
		Age (55 and above)	12538	0.009	0.097	0	1
		Married	12538	0.782	0.413	0	1
		Occupation (public officer)*	12538	0.003	0.054	0	1
		Occupation (technical expertise)	12538	0.053	0.224	0	1

		Occupation (office clerk)	12538	0.006	0.076	0	1
		Occupation (agriculture, animal husbandry and fishery)	12538	0.010	0.099	0	1
		Occupation (production and transportation)	12538	0.418	0.493	0	1
		Occupation (unoccupied)	12538	0.027	0.163	0	1
	Migration characteristics	Time of migration into the area (year)	12538	4.429	4.407	0	36
		Scope of migration (cross-county)*	12538	0.086	0.280	0	1
		Scope of migration (cross-city)	12538	0.339	0.473	0	1
	Regional characteristics	Destination (Changsha)*	12538	0.113	0.316	0	1
		Destination (Quanzhou)	12538	0.121	0.326	0	1
		Destination (Suzhou)	12538	0.240	0.427	0	1
		Destination (Wuxi)	12538	0.135	0.341	0	1
		Destination (Wuhan)	12538	0.107	0.309	0	1
		Destination (Xi'an)	12538	0.115	0.319	0	1
		Destination (Xianyang)	12538	0.064	0.244	0	1
		Per capita GDP (logarithm)	12538	10.52	0.305	9.889	11.44

3. Measurement strategy

In order to explore the differentiated impact of the backwash effect of endowment of registered residence and the integration of the area of destination, a binary Logistic regression model is employed in this study to analyze the influence of various factors on the settlement or residence intention of floating population. To this end, we have built the following two benchmark models in this paper:

(1)

(2)

Here, RP_i and HP_i represent the floating population's residence and settlement intention respectively; is the social integration of the Kth dimension (K=1, 2, 3, 4, corresponding to economic integration, institutional integration, social relationship integration and psychological integration, respectively); represents the endowment of registered residence; and X is the control vector of individual characteristics, including natural characteristics (gender, age, education level, marital status and occupation), mobility characteristics (such as the time of mobility and the scope of

mobility) as well as the area of origin and the area of destination.

4. Empirical Results and Analysis
1 .The residence intention model of floating population
    In the empirical study, we gradually incorporate the kernel explained variables and control variables into the regression model, and regress (1) and (2) respectively to investigate the influence of different factors on the settlement intention or residence intention of migrants. The average marginal effect (AME) of the explained variables is reported in the Logistic regression results and the delta method is used to obtain the associated standard errors and confidence intervals.

    From Table 3, we can see that Model (1) includes the endowment of registered residence only; on the basis of Model (1), Models (2) to (5) include economic, institutional, social relationship and psychological integration variables successively to represent the differences in social integration of the area of destination; and Model (6) contains all the control variables, adding demographic characteristics, migration characteristics, as well as the area of origin and the area of destination.

Table 3 Measurement results of urban-rural migrants' residence intention[23]

		(1)	(2)	(3)	(4)	(5)	(6)
Endowment of the Area of Origin	Land area (100 mu)	0.003	0.027	0.025	0.040	0.048	0.048
		(0.93)	(0.45)	(0.4)	(0.26)	(0.19)	(0.20)
	Housing area (100m^2)	-0.023***	-0.022***	-0.023***	-0.020***	-0.020***	-0.015***
		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
	New rural cooperative medical system	-0.033***	-0.011	-0.011	-0.011	-0.007	-0.004
		(0.00)	(0.11)	(0.30)	(0.26)	(0.46)	(0.685)
	New rural cooperative medical system	-0.025**	-0.017*	-0.015	-0.027***	-0.013	-0.007
		(0.01)	(0.09)	(0.12)	(0.00)	(0.16)	(0.444)
Economic Integration	Monthly income (logarithm)		0.061***	0.060***	0.045***	0.039***	0.036***
			(0.00)	(0.00)	(0.00)	(0.00)	(0.009)
	Government housing		-0.057	-0.062	-0.051	-0.038	-0.063
			(0.28)	(0.24)	(0.32)	(0.44)	(0.198)
	Unit housing		-0.166***	-0.167***	-0.113***	-0.088***	-0.051***
			(0.00)	(0.00)	(0.00)	(0.00)	(0.000)
	Self-owned housing		0.420***	0.413***	0.341***	0.276***	0.229***
			(0.00)	(0.00)	(0.00)	(0.00)	(0.000)
	Other housing		0.011	0.008	0.036	0.053*	0.020

[23] Note: Model (6) does not list the regression results of the control variables considering the length of this paper. ***, ** and * indicate significance at 1%, 5% and 10% respectively. The figures in brackets are robust standard deviations adjusted for heteroskedasticity, representing significance at 1%, 5%, and 10%, respectively.

Institutional Integration		C1	C2	C3	C4	C5	C6
			(0.72)	(0.80)	(0.25)	(0.08)	(0.507)
Institutional Integration	Residence permit			0.006	0.007	0.012	0.011
				(0.52)	(0.38)	(0.16)	(0.278)
	Endowment insurance			0.13	0.024	-0.002	-0.005
				(0.018)	(0.18)	(0.90)	(0.758)
	Medical insurance			-0.001	0.011	0.030*	0.034**
				(0.96)	(0.52)	(0.07)	(0.036)
Social Integration	The number of accompanying family members				0.071***	0.059***	0.055***
					(0.00)	(0.00)	(0.000)
	Local neighbors				0.068***	0.039***	0.027***
					(0.00)	(0.00)	(0.001)
	Social interaction				0.009***	0.006***	0.004***
					(0.00)	(0.00)	(0.000)
	Community activities				0.034***	0.019***	0.010**
					(0.00)	(0.00)	(0.044)
Psychological Integration	Identity (local)					0.215***	0.204***
						(0.00)	(0.000)
	Identity (unknown)					0.139***	0.094***
						(0.00)	(0.000)
	Psychological distance					0.156***	0.156***
						(0.00)	(0.000)
	Pseudo -R^2	0.0024	0.0482	0.0486	0.0798	0.1467	0.1838
	N	12538	12538	12538	12538	12538	12538

It can be seen that the backwash effect of the endowment of registered residence among floating population is basically consistent with the effect in the dimension of social integration, and the result is relatively steady. The empirical results also show that these two effects have something in line with our theoretical expectation, but there are also some special features:

Firstly, judging from the endowment of registered residence, the variable of housing is the most stable and the most significant factor in the backwash effect, but its impact on residence intention is very low. On average, when the housing area in the area of registered residence increases 100m^2, the floating population's residence intention decreases 1-2%. After controlling all the variables, the institutional guarantee of registered residence does not have the same significance. This suggests that in addition to living factors, the floating population may not attach great importance to the resources and institution of registered residence (up to about 5%)

when considering long-term residence in the city, and the backwash effect is not significant.

Secondly, judging from the degree of social integration in the area of destination, there are differences in the impact of different integration dimensions on the residence intention: (a) in economic integration, income and housing variables are the most significant. For every 1% increase in monthly income, the residence intention will increase 3-6%. At the same time, the residence intention of the individuals who have dwellings provided by their employer is 5-16% lower than that of the individuals renting private houses, while the residence intention of self-owned house purchasers is 20-40% higher; (b) in institutional integration, residence permits, urban health insurance and endowment insurance do not have a consistent effect on the floating population's residence intention; (c) the variables in the dimension of social integration have a significant positive effect on residence intention, with an increase of 5-7% for each accompanying family member, and the type of neighbors, the degree of social interaction and the participation in social activities account for 1-3% of residence intention; and (d) the improvement in psychological integration may be the most important factor affecting residence intention. The residence intention of those individuals with stronger identity is nearly 20% higher, and the residence intention of the individuals who have a closer psychological distance with the area of destination will also increase by 15% or so.

2. The settlement intention model of floating population

Residence intention will be taken as an explained variable in Table 4 with the same kernel explained variables and other control variables to further analyze the key factors that affect the residence intention of floating population from the perspectives of endowment of the area of origin and social integration of the area of destination.

Table 4 Measurement results of urban-rural migrants' settlement intention[24]

		(1)	(2)	(3)	(4)	(5)	(6)
Endowment of the Area of Origin	Land area (100 mu)	0.016	0.032	0.025	0.033	0.040	0.012
		(0.66)	(0.39)	(0.49)	(0.37)	(0.30)	(0.72)
	Housing area (100m^2)	-0.017***	-0.016***	-0.018***	-0.017***	-0.017***	-0.010**
		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.03)
	New rural cooperative medical system	-0.056***	-0.045***	-0.023**	-0.020**	-0.016	0.000
		(0.00)	(0.00)	(0.03)	(0.05)	(0.11)	(0.98)
	New rural cooperative medical system	-0.006	0.000	0.005	-0.020	0.008	0.002
		(0.58)	(0.98)	(0.65)	(0.84)	(0.43)	(0.84)
Economic Integration	Monthly income (logarithm)		0.037***	0.033***	0.023**	0.018**	0.016*
			(0.00)	(0.00)	(0.02)	(0.05)	(0.10)
	Government housing		0.113**	0.094	0.098*	0.108**	0.044

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[24] Note: Model (6) does not list the regression results of the control variables considering the length of this paper. ***, ** and * indicate significance at 1%, 5% and 10% respectively. The figures in brackets are robust standard deviations adjusted for heteroskedasticity, representing significance at 1%, 5%, and 10%, respectively.

Category	Variable						
			(0.05)	(0.120)	(0.09)	(0.05)	(0.41)
	Unit housing		-0.120***	-0.125***	-0.091***	-0.070***	-0.037***
			(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
	Self-owned housing		0. 201***	0.174***	0.128***	0.076***	0.071***
			(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
	Other housing		0.059*	0.046	0.064*	0.079**	0.017
			(0.08)	(0.17)	(0.05)	(0.01)	(0.61)
Institutional Integration	Residence permit			0.029***	0.030***	0.034***	0.005
				(0.00)	(0.00)	(0.00)	(0.67)
	Endowment insurance			0.035*	0.030*	0.009	-0.005
				(0.06)	(0.09)	(0.60)	(0.78)
	Medical insurance			0.061***	0.067***	0.08***	0.042**
				(0.00)	(0.00)	(0.00)	(0.01)
Social Integration	The number of accompanying family members				0.045***	0.035***	0.042***
					(0.00)	(0.00)	(0.00)
	Local neighbors				0.047***	0.025***	0.032***
					(0.00)	(0.00)	(0.00)
	Social interaction				0.011***	0.008***	0.005***
					(0.00)	(0.00)	(0.00)
	Community activities				0.010**	0.000	0.012**
					(0.05)	(0.96)	(0.01)
Psychological Integration	Identity (local)					0.198***	0.200***
						(0.00)	(0.00)
	Identity (unknown)					0.137***	0.114***
						(0.00)	(0.00)
	Psychological distance					0.083***	0.110***
						(0.00)	(0.00)
	Pseudo -R^2	0.0024	0.0482	0.0486	0.0798	0.0797	0.1226
	N	12538	12538	12538	12538	12538	12538

Firstly, judging from the endowment of the area of origin, the backwash effect of housing on settlement intention is significant, but the security system in the area of origin has no obvious effect.

Secondly, in terms of the social integration of the area of destination: (a) in economic integration, the impact of income and housing factors is still significant, but their importance has declined. Among them, the degree of self-owned housing drops by one third or so (than renting private houses), which shows that settlement may not entirely depend on economic factors. On the other hand, it is also confirmed that economic factors may be the main reason for "pendulum" or "migratory-bird" migration of floating population[25]; (b) in institutional integration, settlement decisions may be more dependent on urban medical insurance; and (c) both social relationship and psychological integration are important factors affecting the choice of settlement.

3. Discussion about the empirical results of residence and settlement intention

Generally, the two models have similar empirical results. However, a further comparison shows that there are still significant differences in the impact of the endowment of the area of origin and the social integration of the destination on the residence or settlement intention of floating population (see Table 5).

Table 5 Comparison of the factors affecting the residence and settlement intention of floating population

		Residence	Settlement
Endowment of the Area of Origin	Land area	0.048	0.012
	Housing area	-0.015***	-0.010**
	New rural cooperative medical system	-0.004	0.000
	New rural social pension insurance	-0.007	0.002
Economic Integration	Monthly income (logarithm)	0.036***	0.016*
	Government housing	-0.063	0.044
	Unit housing	-0.051***	-0.037***
	Self-owned housing	0.229***	0.071***
	Other housing	0.02	0.017
Institutional Integration	Residence permit	0.011	0.005
	Endowment insurance	-0.005	-0.005
	Medical insurance	0.034**	0.042**
Social Integration	The number of accompanying family members	0.055***	0.042***
	Local neighbors	0.027***	0.032***
	Social interaction	0.004***	0.005***
	Community activities	0.010**	0.012**
Psychological Integration	Identity (local)	0.204***	0.200***
	Identity (unknown)	0.094***	0.114***

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[25] Other scholars also use the concepts of "temporary relocation", "non-permanent relocation" or "circular relocation". They are all consistent in terms of content definition, which refer to the status where floating population or migrants do not intend to permanently change their permanent residence.

	Psychological distance	0.156***	0.110***

Firstly, the impact of housing on residence intention is even more pronounced. Among them, the effect of housing in the area of origin on residence intention (-0.015) is 0.5 percentage points higher than that on settlement intention (-0.01); the impact of living in company dorms ("unit housing") on residence intention (-0.051) is 1.4 percentage points higher than on settlement intention (-0,037); and the impact of owning ("self-owned housing") in the area of origin on residence intention (0.229) is 15.8 percentage points higher than that on settlement intention (0.071). It shows that for the floating population, the housing factor is mainly manifested as a short-term effect, and having better housing conditions both in the hometown and in the urban areas mainly affects the place of work rather than the place of settlement.

Secondly, the effect of income on residence intention is also higher. On average, the impact of monthly income on residence intention (0.036) is 2 percentage points higher than that on settlement intention (0.016). This also shows that the economic factor is more of a short-term effect, rather than the primary factor that determines the willingness of migrants to settle down.

Thirdly, the institutional factor has a greater effect on settlement intention. In particular, only urban medical insurance is significant, and its effect on settlement intention (0.042) is 0.8 percentage point higher than that on settlement intention (0.034), indicating that when enjoying urban medical insurance migrant workers' willingness to settle in cities will be higher and they are more inclined to join the registered residence in urban areas.

Fourthly, the impact of social factors on settlement intention is also stronger. Among them, the impact of having local neighbors on residence intention (0.032) is 0.5 percentage points higher than that on settlement intention (0.027); the impact of social interaction with local groups on residence intention (0.005) is 0.1 percentage points higher than that on settlement intention (0.004); and the impact of the frequency of participation in community activities on residence intention (0.012) is 0.2 percentage points higher than that on settlement intention (0.010). It shows that participation in community building and community activities plays an important role in social integration.

To sum up, it is easy to see that one of the characteristics of the current decision-making among floating population is that economic factors (housing and income) are more likely to encourage the agricultural population to "work" (stay) in cities, while institutional and social factors are the main factors determining the floating population's willingness to "live" (settle down) in cities. From the perspective of social integration, it is also proven that the urbanization of our country is at a crucial stage of "transforming from economic integration to social interaction and integration". [26]The richer the social network of migrants in the area of destination, the smaller the difference between various social capitals they have and the transferred capital for settlement, the more inclined they are to settle down in cities and the easier it is to achieve social integration.

5. Conclusions and Policy Implications

[26] Ye Juntao, Qian Wenrong, Mi Songhua, *"Urban Integration Path of Migrant Workers and Its Influencing Factors"*, Zhejiang Social Sciences, no.4, 2014.

Based on the data from the dynamic monitoring on floating population in 2013 by the National Health and Family Planning Commission, this paper examines the settlement decision, settlement intention and social integration among urban and rural migrants in the process of urbanization. The empirical study shows that their current mobility model does not follow the classical push-pull model completely, but there is a two-way mechanism: the backwash effect of the area of endowment and the merging effect of the area of destination. However, it has different impacts on the individual's residence or settlement choices. Specifically:

Firstly, the endowment of the area of origin has a certain backwash effect, but its impact on specific decisions is different. Among them, housing is an important factor for the floating population to leave cities (the area of origin) and return home (registered residence), which will reduce residence or settlement intention by 1-1.5 percentage points; the new rural social pension insurance mainly affects the floating population's residence intention; and the backwash effect of the new rural cooperative medical system mainly determines their settlement intention. This suggests that the absence of the urban housing security system and the inadequate coverage of urban medical insurance have become major obstacles for migrant workers to settle down in the area of destination.

Secondly, judging from the integration effect of the economic dimension, the income factor is not as important as it was thought in the past. The housing condition in urban areas is the most important factor that affects residence or settlement. In contrast, the residence or settlement intention of those who own their own house is 7-22% higher than that of renters; living in collective hostels significantly reduces the residence or settlement intention by 5%, indicating that the relatively poor living conditions provided by the company or the employer also becomes an important factor limiting the population mobility. Judging from the statistical description, such population accounts for about a quarter of the total population, so this negative impact should not be underestimated.

Thirdly, in terms of the institutional dimension, having urban medical insurance in the area of destination will significantly increase the individual's intention to stay or settle in cities by 3-4 percentage points. However, endowment insurance and residence permits have not generated enough attraction for the floating population. It shows that the floating population may pay more attention to urban medical insurance. On the other hand, it also shows that the construction of the social system such as the endowment insurance and residence permit system has not played a substantial part as public services and has not brought into full play the role of integration with the migrant population[27].

Fourthly, in social relationship and psychological integration, the contribution of family companionship and local neighbors to residence or settlement intention of floating population reaches 3-5%. At the same time, individuals who think they are native or new locals have a 10-20 percentage point higher residence or settlement intention. This fully shows that the construction of psychological integration and

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[27] In 2013, except for Wuxi, Xi'an and Xianyang, the other five cities started to introduce a residence permit system for migrant workers with stable employment and residence. However, at the beginning, it was more significant in population registration and management and was not pegged with urban public services. For example, cities such as Changsha and Wuhan did not start extending nationwide public services to migrants with residence permits until the country introduced a new urbanization strategy in 2014 and the *Provisional Regulations on Residence Permits* issued in 2015.

psychological identity of floating population can help to alleviate and eliminate the population barrier within the society and the identity with the city of destination will greatly affect the floating population's decisions. This also supports quantitatively the qualitative understanding of the psychological integration characteristics of the floating population in China by scholars such as Ren Yuan and Cui Yan[28][29].

In short, the reasons why there are differences in the effect of various factors on the individual's residence or settlement decisions are as follows: Economic factors mainly bring short-term effects and are more likely to affect the migrants' residence (place of work) choices; and the migrants who are to decide whether to settle down pay more attention to their own long-term interests, including whether they can enjoy the benefits such as medical insurance and social welfare in their place of residence. Meanwhile, social factors determine the individual's social capital in their place of residence and thus become the key to decide the settlement intention of floating population.

From a theoretical perspective, in the context of China's institutional transition and household registration system, the practical significance of migrants' choice of staying (long-term residence) and settling down (transfer of registered residence) are completely different: They do not give up their original agricultural registered residence (and its relevant benefits) while working in the area of destination, residence is more of a flexible option and the opportunity cost of the individual's transfer is lower. On the other hand, settlement not only means that the migrant population need to abandon the guaranteed land and homestead, but also means that the individual will face the transfer of social capital, so the opportunity cost is higher. Therefore, in the current stage of social integration, the settlement decision of floating population takes into account not only the economic factors such as income, but also whether they can enjoy equal opportunities for survival and development in cities, and whether they can find the social capital for their and their family's survival and development. This has caused the different impact of economic, institutional and social factors on the floating population's residence or settlement intention.

It is clearly stated in the *"Outline of the 13th Five-Year Plan"* that "the advancement of the new urbanization" shall start from the reform of the household registration system and the residence permit system as well as the citizenization of agricultural population, and we should speed up the integration of more floating population into cities and towns. Judging from our findings: Firstly, it is of utmost importance to fully cover urban and rural population with basic public services, including improving the employment, housing and social security systems in the area of destination, giving full play to substantial role of the residence permit system in rural-urban employment and public service equalization; secondly, we need to equalize the participation in social and community governance, encourage floating population to participate in community building and enhance their identity with the area of destination. It is a very crucial but still blank area in improving social integration and enhancing the endogenous fusion power of urbanization, which can not only inhibit the backwash effect of the area of origin, but also help to strengthen the merging effect of the area of destination.

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[28] Ren Yuan, Tao Li, *"Localized Social Capital and Promoting Social Integration of Floating Population"*, Population Research, no.5, 2012.
[29] Cui Yan, *"A Study on Social Integration and Identity of Migrant Population at the Psychological Level"*, Sociological Studies, no.5, 2015.