Economic Gains with Social Pains: Migration Patterns and its Consequences among Internal Migrants in China

Bowen WANG Department of Sociology Xi'an Jiaotong University 28 West Xianning Road, Xi'an, Shaanxi Province, 710049, China Email: boon_w@163.com Tel: +86-15809189580

Zhongshan YUE Department of Sociology Xi'an Jiaotong University 28 West Xianning Road, Xi'an, Shaanxi Province, 710049, China Email: zhshyue@xjtu.edu.cn Tel & Fax: +86-29-8266-8384

Jian YAO Department of Sociology Xi'an Jiaotong University 28 West Xianning Road, Xi'an, Shaanxi Province, 710049, China Email: cyuyaojian@163.com Tel: +86-17791104916

Shuzhuo LI School of public policy and administration Xi'an Jiaotong University 28 West Xianning Road, Xi'an, Shaanxi Province, 710049, China Email: shzhli@mail.xjtu.edu.cn Tel & Fax: +86-29-82668384

*Extended abstract prepared for presentation at the 2024 annual meetings of the Population Association of America, Columbus, Ohio. This study is supported by the National Natural Science Foundation of China (72174165) whose support is gratefully acknowledged.

Abstract

Amid China's extensive population mobility, this paper, using 2017 China Migrant Dynamic Survey data and employing Latent Class Analysis, identified three types of migration patterns: Individual Short-Term Labor Migration (ISTL), First-time Family Migration (FFM), and Multiple Family Migration (MFM). It reveals that ISTL significantly boosts migrants' income but diminishes their sense of belonging, highlighting the trade-off between individual migration and urban attachment. Conversely, FFM, while reducing income, enhances migrants' sense of belonging, emphasizing the balance between family reunification and economic opportunities. Income's impact on migrants' sense of belonging varies, mitigating ISTL's negative effect but not universally across all migrants. This research underscores the complex trade-offs between economic gains and social losses in migrants' sense of belonging, affirming the challenge of achieving both objectives simultaneously. Recognizing these complexities is vital for crafting policies that address the diverse needs of China's internal migrants.

keywords: migrants, migration patterns, LCA, China

1. Introduction

China's accelerating urbanization has witnessed a significant surge in the number of individuals migrating from rural to urban areas, with intercity mobility also on the rise. China's internal migrants including rural-urban migrants and urban-urban migrants have emerged as prominent participants in the urbanization process, and the diversity of their migration patterns holds substantial implications for both urban development and social stability. Using Latent Class Analysis (LCA), previous research has made important contributions in understanding latent migration types that have been usually identified based on migrants' migration experiences and settlement intentions. However, this approach blurs the distinction between migration experiences and their consequences, and overlooks the intricacies and nuances arising from real-life migration scenarios, which hinders the identification of migrants' true migration patterns and their potential socioeconomic outcomes.

Therefore, we focus on identifying migration patterns based on the actual experiences of migration. This approach aims to capture the authentic essence of migration patterns. Recognizing migration types based on real experiences not only acknowledges the diversity of migration pathways but also bridges the gap between theoretical classifications and the realities of migration experiences. Our paper offers a more comprehensive and context-specific understanding of the dynamic nature of internal migration in China.

The objective of this study is to provide a more nuanced understanding of internal migration patterns in China and discuss the potential variations in socioeconomic outcomes associated with different migration patterns. Our research findings lay the foundation for more targeted policy interventions, contributing to the development of policy frameworks that facilitate migrant integration and improve migrants' well-being.

2. Data and Methods

Data: This study utilizes data from the 2017 China Migrant Dynamic Survey (CMDS), a nationally representative dataset known for its extensive coverage and large sample size. The CMDS adopted a Probability Proportional to Size (PPS) sampling method. Respondents were non-local residents aged 15 and above who have resided in the surveyed area for at least one month. The survey covered 31 provinces (regions, municipalities) and the Xinjiang Production and Construction Corps. After excluding samples with missing values, the final dataset comprises 165,088 valid cases, including 129,786 rural-urban migrants and 35,302 urban-urban migrants.

Measures

Dependent Variables: economic consequence and social consequence

Income is used as an indicator of economic consequence and measured by the average monthly income of migrants in the past month (or their last employment). We use a logarithm of income plus 1 in regression models.

Sense of belonging is used to capture social consequence of migration pattern and operationalized by a five-item scale, with responses ranging from 1 (strongly disagree)

to 4 (strongly agree). A higher total score indicates a stronger sense of belonging. One of the scale items is "I like the city/place I currently reside in". This scale demonstrated good reliability for the current study (Cronbach's alpha = 0.828).

Independent Variables: The key independent variable is the types of latent migration patterns identified through LCA.

In regression analyses, we also control for some demographic characteristics and regional factors including age, gender, education, marital status, housing, occupation, region.

Analytical strategies

Frist, we employ the Latent Class Analysis (LCA) method, utilizing six key variables (migration motivation, duration, migration distance, family migration, migration frequency and household registration status) to identify three latent migration patterns: Individual Short-Term Labor (ISTL), First-time Family Migration (FFM), and Multiple Family Migration (MFM). It is worth noting that these three latent types are prominently present in all three of our samples. Furthermore, the entropy values for the latent three-class in the whole sample, rural to urban migrants' sample, and urban to urban migrants' sample were 0.850, 0.878, and 0.845, respectively, with statistically significant VLMR-LRT and BLRT statistics (see *Table 1*).

Table 1 about here

Moreover, we utilized the three identified migration patterns from LCA as key independent variable and employed ordinary least squares (OLS) regression to analyze income and sense of belonging. Notably, given the unique nature of China's hukou (household registration) system, we introduced interaction terms between hukou and migration patterns separately into the income (Model 4) and the sense of belonging (Model 8). This was done to investigate whether there are hukou effects on the influence of migration patterns on income and sense of belonging. In particular, to examine whether the migrants' sense of belonging in different migration patterns is influenced by income, we included interaction terms between migration patterns and income in the Model 9 and Model 10.

3. Results

3.1 The characteristics of the latent three migration patterns

Descriptive results (*Table 2*) reveal significant attributes of these three migration types. ISTL primarily comprises young, educated males who migrate solo in search of employment opportunities, with relatively short durations of residence in the destination. In contrast, FFM migrants are typically older females who stay longer in the destination but exhibit relatively lower income levels. MFM is predominantly led by males.

Table 2 about here

3.2 The economic and social consequences of the latent three migration patterns

3.2.1 Economic Consequence of Migration Patterns

Firstly, with respect to the influence of migration patterns on migrant income, we observed that the "Individual Short-Term Labor (ISTL)" pattern significantly enhances migrants' economic gains when compared to the reference group of "Multiple Family Migration (MFM)." Notably, this effect remains consistent across various models and is independent of their household registration (*hukou*) status (*Table3: Model 1, Model 2, Model 3, Model 4*). This finding suggests that once migrants embark on individual mobility for livelihood opportunities in cities, they stand to reap substantial economic rewards, irrespective of whether they hold urban hukou or not. This underscores the favorable economic impact of selective individual migration on urban labor markets, contributing to labor market flexibility and development.

Table 3 about here

However, a different scenario emerges for "First-time Family Migration (FFM)" migrants. Urban hukou status seems to play a significant role in this context, as compared to MFM migration, FFM migration substantially reduces the likelihood of urban-urban migrants achieving higher income *(Table3: Model 3, Model 4)*. This outcome may reflect the initial adaptation challenges and employment constraints faced by first-time family migrants in urban areas. Consequently, policymakers should consider providing additional support and opportunities to this group to facilitate their better integration and development within the city.

3.2.2 Social Consequence of Migration Patterns

Regarding sense of belonging, our data consistently demonstrate that, in contrast to the MFM pattern, migrants of ISTL pattern have significantly lower level of sense of belonging, while migrants in the FFM group enjoy significantly higher psychological attachment to the city (*Table3: Model 5, Model 6, Model 7*). Remarkably, we find that although holding urban hukou may boost migrants' sense of belonging, the impact of latent migration types on migrant sense of belonging is not subject to hukou effects (*Table3: Model 8*).

3.2.3 Income Effects on sense of belonging across Different Migration Patterns

Furthermore, we explored the role of income in shaping sense of belonging across different latent migration types. When we included income-interaction terms with the three latent migration types in the full sample (*Table3: Model 9*), the negative impact of ISTL pattern on sense of belonging was entirely mitigated, with the interaction coefficient being significantly negative. This indicates a compensatory income effect: as income increases, the adverse impact of ISTL pattern on sense of belonging diminishes. However, income effects did not prove significant in the rural-urban migration sample (*Table3: Model 10*), suggesting that, for rural-urban migrants, regardless of the migration pathway they follow, income does not influence the impact of migration patterns on their sense of belonging.

4.Conclusion

This study underscores the need to recognize the diversity of migration patterns and their consequences within the context of rapid urbanization in China. Understanding the subtle interplay between migration and its social and economic consequences is crucial for policymaking that addresses the multifaceted needs and aspirations of China's mobile population. Based on the findings of this research, complex interactions exist among migration patterns, income, and urban identity among China's internal migrants.

Our research identifies three distinct migration patterns among China's internal migrants: Individual Short-Term Labor (ISTL), First-time Family Migration (FFM), and Multiple Family Migration (MFM). Within these patterns, ISTL pattern significantly enhances migrants' economic well-being in urban areas, regardless of their household registration status. However, migrants of this pattern had lower level of sense of belonging to the city, emphasizing that the substantial economic potential provided by individual migration may come at the cost of undermining migrants' attachment to the city. In contrast, FFM pattern, often pursued for family reunification, presents a different scenario. Within family-oriented migration, the FFM pattern reduces migrants' economic income but significantly enhances their sense of urban belonging. This underscores a concept akin to "balancing fish and bear's paw," where individuals often must make sacrifices or face challenges when balancing family reunification with urban economic opportunities.

Furthermore, income plays a multifaceted role in shaping migrants' sense of belonging to urban society. While income can mitigate the negative impact of ISTL pattern on urban identity, this effect is not universally present across all migration types. This implies that, migrants get economic gains but endure social pains in terms of psychological connection to the city.

In summary, this study elucidates the complex choices and trade-offs for migrants between economic benefits and social losses of sense of belongings to urban society. It underscores the notion that individuals must navigate complex decisions between economic gains and a strong sense of urban belonging, migrants can't have their cake and eat it. By acknowledging these complexities, policymakers and social actors can better promote their economic benefits without sacrificing their socio-psychological well-being.

Number of Class	K	AIC	BIC	aBIC	VLMR-LRT	BLRT	Entropy	Sample Proportion (%) per Class
Whole migrants:(N	=1650	88)						
C3	26	1450093.413	1450353.784	1450271.154	0.000	0.000	0.850	0.17574/0.44310/0.38116
C4	35	1447634.614	1447985.112	1447873.880	0.000	0.000	0.693	0.37559/0.08803/0.39581/0.14057
C5	44	1446545.706	1446986.332	1446846.498	0.000	0.000	0.590	0.36012/0.07930/0.36780/0.05209/0.14069
C6	53	1445951.657	1446482.411	1446313.975	0.000	1.000	0.501	0.15500/0.23882/0.12914/0.09581/0.25283/0.12840
Rural-Urban migra	nts:(N	T=129786)						
C3	23	998948.338	999173.132	999100.037	0.000	0.000	0.878	0.15153/0.44376/0.40471
C4	31	997898.382	998201.365	998102.846	0.000	0.000	0.496	0.17934/0.37000/0.16200/0.28866
C5	39	997448.554	997829.727	997705.783	0.000	0.000	0.523	0.00817/0.28850/0.30503/0.24268/0.15563
C6	47	997271.668	997731.029	997581.661	0.914	0.000	0.563	0.08251/0.15778/0.31311/0.05770/0.33170/0.05720
Urban-Urban migr	ants:(1	N=35302)						
C3	23	277469.449	277664.298	277591.204	0.000	0.000	0.845	0.21254/0.45167/0.33579
C4	31	277191.640	277454.262	277355.744	0.000	0.000	0.663	0.02864/0.43638/0.20191/0.33307
C5	39	276950.538	277280.934	277156.992	0.000	0.000	0.747	0.08300/0.00448/0.39134/0.32162/0.19956
C6	47	276889.975	277288.145	277138.779	0.000	0.000	0.723	0.09929/0.38392/0.11716/0.27166/0.08184/0.04614

Table 1 Fit indicators for Latent Class Analysis

Data source: 2017CMDS.

		W	hole Samnl	e	Rura	 I-Urban mig	rants	Urban-Urban migrants			
		Types of migration patterns			Types of	f migration 1	oatterns	Types of migration patterns			
		(column, %)			(column, %)	(column, %)			
	Whole	ISTL	FFM	MFM	ISTL	FFM	MFM	ISTL	FFM	MFM	
Migration motivation											
Work/Employment	62.45	95.23	55.10	55.88	98.99	54.71	56.00	91.36	55.13	59.48	
Business	23.64	0.21	25.28	32.53	0.00	26.23	32.76	0.00	21.62	27.51	
Follow/Marriage	13.91	4.57	19.62	11.59	1.01	19.06	11.23	8.64	23.24	13.01	
Inter-provincial migration	49.61	49.80	46.46	53.19	50.75	47.99	55.09	44.21	40.92	46.48	
Duration											
Short-term (mean 1.10 years)	33.35	62.49	19.87	35.58	68.78	20.68	35.63	54.18	18.90	32.27	
Medium-term (mean 4.55 years)	33.46	30.83	31.73	36.69	31.22	31.08	35.32	37.39	33.29	38.28	
Long-term (mean 13.13 years)	33.19	6.68	48.40	27.73	0.00	48.24	29.05	8.44	47.81	29.45	
Family migration	75.96	0.00	89.90	94.79	0.00	90.64	92.32	0.00	85.00	94.10	
Migration frequency											
Migrate only once	52.11	44.41	100.00	0.00	46.25	100.00	0.00	45.33	100.00	0.00	
Migrate twice	26.90	30.02	0.00	56.72	27.33	0.00	55.41	33.20	0.00	62.72	
Migrate three or more times	20.99	25.56	0.00	43.28	26.43	0.00	44.59	21.47	0.00	37.28	
Have an urban hukou	21.38	26.07	21.72	18.84	0.00	0.00	0.00	100.00	100.00	100.00	
Demographic characteristics:											
Male	51.77	56.38	47.31	54.84	58.05	47.37	55.04	52.02	46.46	55.30	
Age	36.26	31.09	38.38	36.17	30.17	37.98	36.15	32.07	39.68	36.55	
Education											
Primary or below	16.86	9.12	20.37	16.34	11.03	23.81	18.67	2.52	7.66	6.18	

 Table 2 Characteristics three of Potential Migration Patterns

Junior high school	44.00	35.30	44.89	46.97	41.51	48.60	51.16	17.33	31.11	28.24
Senior high school	21.85	25.93	21.13	20.81	26.70	19.23	19.83	24.51	28.16	25.37
College or above	17.29	29.64	13.61	15.88	20.76	8.37	10.35	55.64	33.06	40.22
Having a spouse	82.30	40.63	88.82	93.95	35.13	88.79	93.56	46.50	88.74	93.22
Socio-economic characteristics:										
Income (mean)	3555.42	3687.77	3183.04	3927.28	3490.62	3032.69	3732.66	4266.40	3695.50	4778.80
Sense of Belonging (range[5- 20])	16.32	15.87	16.56	16.24	15.59	16.42	16.12	16.47	17.06	16.78
Sample size	165088	29013	73150	62925	19666	57594	52526	7503	15945	11854
Percentage of sample	100.00	17.57	44.31	38.12	15.15	44.38	40.47	21.25	45.17	33.58

Data source: 2017CMDS.

Notes:

i. Category variables are reported as percentage, continuous variables are reported as mean.

ii. Short-term, Medium-term, and Long-term durations were obtained by dividing the duration into thirds and ranking them in ascending order.

iii. ISTL: Individual Short-Term Labor; FFM: First-time Family Migration; MFM: Multiple Family Migration.

	E	conomic conseq	uence : Incol	ne	Social consequence : Sense of Belonging									
Sample	Whole Sample	Rural- Urban Migrants	Urban- Urban Migrants	Whole Sample	Whole Sample	Rural- Urban Migrants	Urban- Urban Migrnts	Whole Sample	Whole Sample	Rural- Urban Migrants				
Model	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10				
	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.				
	(St.Err.)	(St.Err.)	(St.Err.)	(St.Err.)	(St.Err.)	(St.Err.)	(St.Err.)	(St.Err.)	(St.Err.)	(St.Err.)				
Migration Patterns	s (ref: MFM)													
ISTL	0.180***	0.230***	0.086**	0.187***	-0.261***	-0.344***	-0.183***	-0.268***	-0.085	-0.220**				
	(0.014)	-0.016	(0.027)	(0.015)	(0.020)	(0.023)	(0.040)	(0.022)	(0.055)	(0.072)				
FFM	-0.023*	-0.020	-0.068***	-0.001	0.134***	0.133***	0.120***	0.144***	0.144***	0.136***				
	(0.010)	(0.011)	(0.021)	(0.011)	(0.013)	(0.015)	(0.029)	(0.015)	(0.030)	(0.034)				
Hukou (ref: Rural	Hukou)													
Urban hukou	0.004			0.061***	0.340***			0.359***	0.340***					
	(0.011)			(0.018)	(0.015)			(0.025)	(0.015)					
Migration Patterns	s#Hukou													
ISTL#Urban Hul	kou			-0.042				0.019						
				(0.027)				(0.040)						
FFM#Urban Hul	cou			-0.109***				(0.050)						
				(0.023)				(0.032)						
Migration Patterns	s#income													
ISTL#income									-0.024***	-0.017				
									(0.007)	(0.009)				
FFM#income									-0.001	-0.000				

Table 3 Regression Results of Migration Patterns on Income and Sense of Belonging

log(income+1)					-0.009* (0.003)	-0.010** (0.004)	-0.000 (0.008)	-0.009 (0.003)	(0.004) -0.006 (0.004)	(0.004) -0.009 (0.005)
Control variables	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Cons	7.713***	7.544***	8.175***	7.700***	15.541***	15.533***	15.953***	15.538***	15.524***	15.527***
	(0.029)	(0.033)	(0.066)	(0.029)	(0.047)	(0.053)	(0.116)	(0.048)	(0.050)	(0.056)
Number of obs	165088	129786	35302	165088	165088	129786	35302	165088	165088	129786
R-squared	0.710	0.699	0.751	0.710	0.085	0.077	0.064	0.085	0.085	0.078
F-test	12417.401	9793.353	3834.719	11137.355	868.239	652.151	144.349	781.942	782.570	584.100
Prob > F	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Akaike crit. (AIC)	644671.433	509383.986	134687.289	644652.900	751826.618	591574.862	160000.364	751826.396	751816.982	591575.167
Bayesian crit. (BIC)	644851.689	509550.138	134831.308	644853.185	752016.889	591750.788	160152.854	752036.695	752027.281	591770.640

Notes: * p < 0.05; ** p < 0.01; *** p < 0.001. The control variables are: Age, Gender, Education, Marital Status, Occupation, Housing, Region.