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From Temporary Migration to Urban Settlement: Children's Co-Migration and Long-Term Residence in China

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ABSTRACT *Using large-scale micro survey data from the China Migrants Dynamic Survey, this paper examines the causal effect of children's co-migration on rural migrants' long-term urban settlement intentions. Exploiting exogenous variation induced by China's compulsory school-entry policy within a two-stage least squares framework, we find that migrating with children significantly increases migrants' long-term settlement intentions in destination cities. Mechanism analyses show that improved access to high-quality educational resources for migrant children is the primary channel through which co-migration enhances settlement intentions, while institutional barriers embedded in the household registration (*hukou*) system partially weaken this effect. By contrast, household income, subjective well-being, and identity-related factors play a limited role. Further heterogeneity analyses reveal that the settlement-enhancing effect of children's co-migration is stronger for households migrating with sons, for migrants in formal employment, and for those relocating to economically more developed eastern regions. These findings underscore the central role of intergenerational considerations in internal migration decisions and highlight how education institutions and registration policies jointly shape migrants' urban integration in developing economies.*

KEYWORDS: Rural migrant children; settlement intention; education; household registration discrimination

JEL CODES: J61; J78; O18; O53; R23

1. Introduction

China is experiencing the world's largest and fastest rural-urban migration process, marked by a pronounced duality in urbanisation. According to the National Bureau of Statistics, the share of the population residing in urban areas rose from 17.9 percent in 1978 to 67 percent in 2024. By contrast, the urbanisation rate measured by household registration (*hukou*) remains below 50 percent. This persistent gap reflects a fundamental institutional tension: although millions of rural workers have relocated to cities, *hukou*-based restrictions continue to limit their access to urban public services. As a result, many migrants remain in a state of partial and reversible

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mobility, forming a large 'floating population'. Understanding how institutional constraints shape family-level migration and settlement decisions is therefore central to explaining China's urbanisation trajectory.

In recent years, rural-urban migration in China has increasingly taken the form of family migration. A growing share of migrants now move with their children rather than leaving them behind (Chan & Ren, 2018). According to the Seventh National Population Census, among China's 298 million children aged 0–17 in 2020, 71.09 million were migrant children and 66.93 million were left-behind children. This demographic configuration reflects a major shift from individual labour migration towards household-based mobility and places children at the centre of migration and settlement decisions.

China provides a particularly well-suited setting for studying the role of children in migration decisions for at least three reasons. First, the *hukou* system generates sharp institutional discontinuities in access to education and other public services, making children's location highly consequential for household welfare. Second, strong socio-cultural norms emphasising education, intergenerational mobility, and family continuity magnify the salience of children in parental decision-making. Third, the coexistence of large-scale migration, persistent institutional exclusion, and rapid educational expansion creates substantial variation in both incentives and constraints facing migrant families, allowing for credible empirical identification of children's role in settlement choices.

When migrant families relocate with children, institutional exclusion becomes especially salient in access to public services, most notably education. The *hukou* system continues to govern school enrolment, progression, and schooling quality, creating uncertainty for migrant families. Combined with intense educational competition and persistent gender preferences, these institutional features imply that contemporary migration decisions are no longer driven solely by short-term income considerations, but rather reflect forward-looking household strategies embedded in intergenerational goals and policy constraints.

Against this backdrop, this paper asks a central question: How does children's co-migration affect rural migrants' long-term settlement intentions in destination cities?

To address this question, we draw on data from the 2012 and 2014–2018 waves of the China Migrants Dynamic Survey (CMDS), covering 294 prefecture-level and above cities nationwide. The CMDS is one of the few large-scale micro surveys in developing countries specifically designed to capture the migrant population, making it uniquely suited for studying family migration and settlement behaviour. Exploiting exogenous variation generated by China's compulsory education policy—which affects the likelihood that school-age children migrate with their parents—we adopt a two-stage least squares (2SLS) strategy for causal identification. Our results show that children's co-migration significantly increases migrants' long-term settlement intentions in destination cities, and this finding is robust across a wide range of sensitivity checks.

Mechanism analyses indicate that children's co-migration strengthens settlement intentions primarily by improving migrant families' access to high-quality educational opportunities for their children, while institutional exclusion associated with the *hukou* system partially offsets this positive effect. Further heterogeneity analyses reveal that the settlement-enhancing effect is stronger for households migrating with sons than with daughters, and is particularly pronounced among migrants in formal employment and those relocating to eastern regions.

This paper contributes to the literature in three main ways. First, by explicitly incorporating children into the framework of family migration decisions, it extends research on household-based migration. Classical migration theories view migration as an individual decision driven by income maximisation (Borjas, 1987), whereas the New Economics of Labour Migration[1] emphasises migration as a household strategy aimed at risk diversification and welfare improvement (Borjas & Bronars, 1991; Mincer, 1978; Stark & Bloom, 1985). Although this framework recognises the embeddedness of migration decisions within families—particularly in societies

with strong family norms such as China (Fan, 2021; Lam & Yeoh, 2019)—existing empirical studies have focused primarily on spousal joint migration or treated family migration as a collective phenomenon (Meng, Zhao, & Liwu, 2016), paying limited attention to decisions involving children. By examining how children's co-migration shapes parents' long-term settlement intentions, this study deepens the NELM framework and highlights the growing importance of children and educational opportunities in migration strategies amid declining family size and the rise of single-child households (Rosenzweig & Zhang, 2009).

Second, this paper advances the literature on the intergenerational consequences of migration by shifting the analytical focus from parents' effects on children to children's influence on parental behaviour. Existing studies have extensively documented the adverse impacts of parental migration on left-behind children, including lower educational attainment and mental health risks (Zhang, Behrman, Fan, Wei, & Zhang, 2014; Zheng, Fang, Wang, & Fang, 2022), as well as the institutional exclusion and educational inequality faced by migrant children in urban school systems (Chen, Feng, & Han, 2020; Chen & Feng, 2013). In contrast, research on the reverse influence of children on parents has been relatively limited and has largely focused on short-term labour market outcomes, such as the constraints of childcare responsibilities on female labour supply (Adda, Dustmann, & Stevens, 2017; Gao, 2025; Liu, Jin, Li, & Zhou, 2024) or the 'pull-back' effect of left-behind children on return migration (Hu, Wang, & Zhang, 2023; Qiu, Hong, Wang, & Filipski, 2024). This study demonstrates that children's co-migration exerts a sustained and forward-looking influence on parents' long-term settlement decisions, thereby broadening the intergenerational perspective in migration research.

Third, by linking family-level migration decisions to China's distinctive institutional constraints, this paper contributes to the literature on migrant integration. Traditional migration theories emphasise wage differentials, migration costs, and human capital endowments (Borjas, 1987). Yet a substantial body of research shows that many migrants in China remain in a state of circular migration, unable to achieve permanent urban settlement (Shen, 2017; Xie, Chen, & Wei, 2023; Yang & Guo, 2018). Institutional analyses further highlight the central role of the *hukou* system in restricting migrants' access to public services and social integration (Cai, 2011; Chen, Shang, & Zhang, 2024; Chen, Zhang, & Zhou, 2026). Existing studies, however, often treat institutional environments and family characteristics as separate determinants. By focusing on children's educational needs and their interaction with public service provision under the *hukou* system, this paper provides a micro-level explanation for how family co-migration simultaneously promotes settlement intentions and remains constrained by institutional barriers. In doing so, it establishes a conceptual link between household migration strategies and macro-level institutional structures, offering new insights into the persistence of circular migration in developing and transitional economies.

2. Institutional background, theoretical framework, and research hypotheses

2.1. Institutional background: hukou institutions, migrant children, and settlement constraints

China's household registration (*hukou*) system is a central institution shaping internal migration and settlement outcomes. Established under the 1958 Regulations on Household Registration, the dual classification of agricultural and non-agricultural *hukou* tightly restricted rural-urban mobility and excluded rural residents from urban welfare provision, reinforcing a rigid urban-rural divide (Chan, 2009).

Since the economic reforms initiated in 1978, *hukou* restrictions have gradually relaxed as rural surplus labour expanded and urban labour demand surged. Large-scale rural-urban migration followed, yet permanent settlement remained elusive for most migrants. While small cities eased *hukou* access, large cities—particularly those offering higher-quality public services—maintained stringent settlement thresholds. The continued linkage between *hukou* status

and access to employment, housing, education, and social security generated a pattern of 'economic inclusion but social exclusion' (Afridi, Li, & Ren, 2015; Song, 2014).

The *2014 Opinions on Further Promoting Hukou Reform* marked a shift towards people-centered urbanisation, aiming to unify *hukou* status and expand access to public services through residence permits (Yao, Wang, & An, 2025). Despite these reforms, substantial regional disparities persist. In major cities, local governments continue to regulate population inflows through requirements related to social insurance contributions and housing stability, resulting in a gradual and localised reform trajectory that still shapes migrants' long-term settlement expectations (An, Qin, Wu, & You, 2024; Chen et al., 2024).

Within this institutional framework, migrant children's education has become a critical determinant of family settlement decisions. Under China's decentralised fiscal system, education is largely financed and administered by local governments, rendering public schooling a quasi-local public good. Rapid migrant inflows initially overwhelmed urban schools, subjecting migrant children to high temporary enrolment fees and complex documentation requirements (Chen & Feng, 2013). Although subsequent policies—beginning with the 2001 'two main responsibilities' principle[2] and reinforced after 2014—expanded access to public schools, educational inequality remains pronounced. While compulsory education access has improved, admission often depends on point-based systems tied to parents' employment and residence duration. Barriers are even more severe at higher educational stages, where eligibility for high school and the college entrance examination remains closely linked to *hukou* status (de Brauw & Giles, 2017; Li & Zhang, 2023).

Together, the *hukou* system and education policies create a setting in which family migration increasingly replaces individual labour migration, with children's educational prospects becoming central to households' settlement calculus.

2.2. *Theoretical framework and hypotheses*

The New Economics of Labour Migration (NELM) conceptualises migration not as an isolated decision driven by short-term income maximisation, but as a collective household strategy formed under imperfect markets to diversify risk and enhance long-term welfare (Stark & Bloom, 1985; Taylor, 1999). Within this framework, household composition—particularly the presence of children and their developmental needs—systematically reshapes migration behaviour and its spatial outcomes.

This family-based perspective is especially salient in the Chinese context. On the one hand, declining family size and the rising prevalence of single-child households have substantially increased the relative weight of each child in household decision-making (Guo, Yi, Zhang, & Zhang, 2025; Rosenzweig & Zhang, 2009). On the other hand, persistent urban-rural disparities in education, public services, and life chances render children's future prospects a central consideration in migration and settlement choices (Dustmann, 2003). Once children are explicitly incorporated into the migration calculus, the economic logic of migration undergoes a fundamental transformation.

2.2.1. Children's co-migration and the intertemporal shift in household migration decisions. Under an individual-centered migration model, migration often takes the form of a reversible and short-term spatial choice, allowing households to flexibly reallocate labour and resources through circular migration. By contrast, children's co-migration implies a cross-regional relocation of the household's centre of life, with implications that extend far beyond labour allocation.

First, co-migration with children lengthens the temporal horizon of household decision-making. The household objective function expands from current income or employment opportunities to long-term outcomes such as children's educational accumulation, social integration, and

intergenerational mobility. This intergenerational planning transforms the city from a temporary workplace into a space for long-term living and development, thereby strengthening households' preferences for residential stability.

Second, children's co-migration increases households' sunk costs in destination cities. School enrolment, the formation of peer relationships, and the development of daily life networks all raise the opportunity cost of exit, reducing the attractiveness of return migration or repeated mobility. In this sense, children's co-migration is not merely an outcome of migration but an endogenous force that facilitates the transition from temporary residence to long-term settlement.

Based on this reasoning, we propose the following hypothesis:

Hypothesis 1: Migrating with children significantly increases rural migrants' long-term settlement intentions in destination cities.

2.2.2. Educational opportunities as the core mechanism linking children's co-migration to settlement intentions. From a human capital perspective, parental investment in children's education constitutes a key channel through which households enhance long-term welfare and intergenerational returns (Caucutt, Lochner, Mullins, & Park, 2026; Garcia & Heckman, 2023). Under China's urban-rural dual structure, cities consistently outperform rural areas in educational quality, teacher resources, and advancement opportunities, making access to education a decisive factor in household migration decisions.

Once children migrate with their parents, the availability of high-quality, stable, and predictable educational resources becomes critical in shaping households' confidence in long-term urban residence. Enrolment in public schools or higher-quality educational systems raises expected returns to children's human capital investment and strengthens parents' incentives to settle permanently. Conversely, frequent school transfers, unstable educational quality, or restricted progression pathways may weaken settlement expectations despite physical relocation to the city.

Education also plays a broader role in social integration. Through school-based interactions, children and their families gradually embed themselves in local social networks, accumulate social capital, and mitigate uncertainty and exclusion during the migration process. These integration effects further reinforce the mediating role of education in linking children's co-migration to long-term settlement intentions.

Accordingly, we advance the second hypothesis:

Hypothesis 2: Children's co-migration increases parents' long-term settlement intentions by improving access to high-quality urban educational resources.

2.2.3. Hukou-related institutional constraints and the attenuation of settlement incentives. Despite the strengthened internal motivation for long-term settlement generated by children's co-migration and educational aspirations, household decisions remain subject to institutional constraints. In China, the *hukou* system continues to play a decisive role in determining migrants' and their children's access to public services (An et al., 2024; Cai, 2011; Chen et al., 2024).

In the education domain, although barriers to compulsory schooling have been reduced, access to high-quality school places, upper-secondary education, and key examinations—most notably the high school entrance exam and the college entrance exam—remains closely tied to *hukou* status or to residency duration, social insurance contributions, and related criteria. This institutional uncertainty substantially increases settlement risks: even when children are currently enrolled in urban schools, uncertainty surrounding future educational transitions may

prompt households to reconsider long-term residence and maintain fallback options such as return migration.

As a result, the *hukou* system exerts a dual influence on settlement decisions. It raises the cost of urban residence by restricting access to public services, while simultaneously weakening the expected returns to educational investment in children, thereby partially offsetting the positive settlement incentives associated with children's co-migration.

From this institutional perspective, we formulate the third hypothesis:

Hypothesis 3: Urban-rural *hukou* disparities constrain rural migrants' long-term settlement intentions by limiting access to public services and educational opportunities.

3. Research design

3.1. Research data and processing

This study conducts a two-stage instrumental variable analysis using data from the 2012 and 2014–2018 China Migrants Dynamic Survey (CMDS). Administered by the National Health Commission, the CMDS adopts a stratified, multistage, probability-proportional-to-size sampling design and covers major migrant-receiving cities across all 31 provinces, autonomous regions, and municipalities, ensuring national representativeness.

The CMDS is well suited for this study for several reasons. First, its large sample size and broad geographic coverage provide sufficient statistical power to examine heterogeneous migration outcomes. Second, the survey period coincides with a critical phase of China's deepening *hukou* reform, allowing us to capture how evolving institutional conditions shape migrants' settlement intentions. Third, the CMDS contains rich household-level information—such as family co-residence, children's migration status, and long-term settlement plans—that is rarely available in other large-scale datasets.

The sample is restricted to married rural-*hukou* migrant worker households with children. Divorced, widowed, and single-parent households are excluded to ensure comparability in family structure. We further limit the sample to households with children under age 16, corresponding to the compulsory education stage when children lack economic independence and migration decisions are largely parent-driven. Observations with missing values on key variables are dropped, and continuous variables are winsorized at the 1st and 99th percentiles. City-level characteristics are obtained from the China City Statistical Yearbook and merged with the CMDS data.

3.2. Variable definitions and model specification

3.2.1. Long-term settlement intention. The dependent variable measures migrants' long-term settlement intentions, defined as planning to stay in the destination city for five years or more. To address variation in question wording across survey waves, we harmonise the measure as follows. For 2012 and 2014–2016, respondents answering 'yes' to whether they plan to live in the city for more than five years are coded as 1. For 2017–2018, respondents reporting an intention to continue staying for at least five years or permanently are coded as 1. Observations from 2011 and 2013 are excluded due to missing settlement information.

3.2.2. Children's co-migration status. The key explanatory variable indicates whether children migrate with their parents. Children residing in the destination city with either parent are classified as migrant children ($Cmig = 1$), while those remaining in the *hukou* location are classified as left-behind children ($Cmig = 0$).

The baseline analysis focuses on the firstborn child, reflecting both China's fertility history and the salience of first-child experience in family decision-making. This restriction is unlikely to bias the results: households with one or two children account for 95.25% of the sample, and cases in which one child migrates while another remains left behind represent only 3.41% of observations. Robustness checks relax this restriction by considering the migration status of the second child and of all children.

3.2.3. Instrumental variable strategy. Children's co-migration may be endogenous, as the decision to bring children could correlate with parental preferences, household resources, or unobserved traits affecting settlement intentions. To address this concern, we exploit exogenous variation generated by China's compulsory school enrolment rule.

Under the 1986 Compulsory Education Law, children must enrol in primary school in their *hukou* locality if they turn six before September of a given year; those born after September delay enrolment until the following academic year. This cut-off generates plausibly exogenous variation in children's migration opportunities based on birth timing.

Because the CMDS is conducted in May or June, six-year-old children have not yet reached the enrolment threshold, whereas seven-year-old children born before September would have been required to enrol in their *hukou* location in the previous year. We therefore construct the instrument (Z_{ict}), which equals 1 if the child turns seven by September of the survey year and 0 otherwise. This variable captures exogenous exposure to compulsory school enrolment constraints that affect the likelihood of children migrating with their parents.

3.2.4. Empirical specification. We estimate the following two-stage least squares (2SLS) model:

$$Cmig_{ict} = \gamma_0 + \gamma_1 Z_{ict} + \gamma_2 X_{ict} + u_t + \rho_c + \varepsilon_{ict} \tag{1}$$

$$Settle_{ict} = \beta_0 + \beta_1 \hat{C}mig_{ict} + \beta_2 X_{ict} + u_t + \rho_c + \varepsilon_{ict} \tag{2}$$

where $Settle_{ict}$ denotes migrant i's long-term settlement intention in city c at time t, and $\hat{C}mig_{ict}$ indicates children's co-migration status. The control vector X_{ict} includes individual-, household-, and city-level characteristics. Individual controls comprise gender, age (and age squared), education attainment, migration distance, and years since migration. Household controls include logged monthly household income, number of children, spouse's education, and indicators for spouse and grandparent co-migration. City-level controls include logged GDP, the share of the tertiary sector, and logged primary school enrolment, capturing local economic conditions and education resources[3]. All monetary variables are deflated to constant 2010 prices using province-level CPI. The model includes city and year fixed effects, and standard errors are clustered at the city level.

3.3. Descriptive statistics

Table 1 reports descriptive statistics for the main variables. During the study period, 77.17% of migrants report long-term settlement intentions, and 72.67% live with their children. Migrants are on average 33.05 years old with nearly 10 years of schooling. Inter-provincial migration is more common than within-province or within-city migration, and the average duration of residence in the destination city is 5.19 years.

At the household level, mean logged monthly income is 8.59 (approximately 5,378 RMB), the average number of children is 1.41, and 92.24% of migrants live with their spouses, indicating the predominance of nuclear-family migration. Co-residence with grandparents is relatively uncommon (6.16%). At the city level, substantial variation exists in economic development and educational resources, as reflected in GDP, industrial structure, and primary school enrolment.

Table 1. Summary statistics of key variables

Variable	N	Mean	SD	Min	Max
Settle	228192	0.7717	0.4197	0	1
Cmig	228192	0.7267	0.4456	0	1
Z	228192	0.5418	0.4983	0	1
Male	228192	0.5952	0.4909	0	1
Age	228192	33.0494	5.4991	20	59
Edu	228192	9.9928	2.5447	0	19
Mdis	228192	2.3191	0.7640	1	3
Mdur	228192	5.1882	4.6187	0	40
lninch	228192	8.5900	0.5013	7.2543	10.1574
Size	228192	1.4126	0.5670	1	7
Sedu	228192	9.9751	2.5657	0	19
Smig	228192	0.9224	0.2676	0	1
Gmig	228192	0.0616	0.2405	0	1
lnGDP	228192	17.4511	1.1048	14.7542	19.3405
Thir	228192	49.5638	12.1442	23.0500	80.2300
lnStu	228192	3.6359	0.7262	1.3987	5.3343

Notes: *Settle* indicates migrants' long-term settlement intention. *Cmig* denotes children's co-migration status. Controls include individual, household, and city characteristics. All income variables are deflated to constant 2010 prices. Detailed variable definitions and measurement are reported in Supplementary Materials Table B1.

4. Empirical results

4.1. Baseline results

Table 2 reports the baseline results. Column (1) presents OLS estimates treating children's co-migration (*Cmig*) as exogenous. The coefficient on *Cmig* is positive (0.1584) and significant at the 1% level, indicating stronger long-term settlement intentions among migrants accompanied by children. Column (2) reports 2SLS estimates using an indicator for whether the child has reached the compulsory school-entry requirement as the instrumental variable. The estimated coefficient increases to 0.2220 and remains significant at the 1% level, implying that children's co-migration raises settlement intentions by about 22.2 percentage points. The larger IV estimate suggests that OLS understates the effect due to negative selection into co-migration, supporting Hypothesis 1. Column (3) presents the first-stage results, showing that meeting the compulsory school-entry requirement significantly reduces the likelihood of children migrating with their parents; the corresponding F-statistic is 56.807, alleviating concerns about weak instruments. Column (4) reports the reduced-form estimates, where the coefficient on the school-entry indicator is insignificant, consistent with the exclusion restriction.

4.2. Validity tests of the instrumental variable

The validity of the instrumental variable (Z) requires satisfaction of both the relevance condition and the exclusion restriction. We assess these conditions using institutional arguments and empirical evidence.

4.2.1. Relevance condition. In China, school enrolment is closely tied to *hukou*-based school-district verification. Once enrolled, transferring to another city involves substantial administrative barriers, documentation, and approval uncertainty, sharply reducing inter-city migration after school entry—a pattern evident in CMDS data. Using 2011–2018 CMDS data, we examine children's migration probabilities by age. The dependent variable equals one if the child

Table 2. Baseline analysis results

	(1) OLS	(2) 2SLS	(3) First-stage	(4) Reduced-form
Cmig	0.1584***	0.2220***		0.1583***
	(0.0056)	(0.0664)		(0.0056)
Z			−0.0477***	−0.0030
			(0.0063)	(0.0030)
Control variables	Yes	Yes	Yes	Yes
City FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
N	228192	228192	228192	228192
R^2	0.1861	0.1829	0.2861	0.1861
F statistics			56.807	

Notes: This table presents the results of the impact of children's migration status on the long-term settlement intentions of the rural migrants. The analysis uses data from the 2012 and 2014–2018 China Migrants Dynamic Survey (CMDS). Column (1) reports OLS estimates, Column (2) presents the second-stage estimates of the instrumental variable (IV) approach, Column (3) shows the corresponding first-stage IV estimates, and Column (4) provides reduced-form regression results. All regressions include city fixed effects, year fixed effects, and control variables. Standard errors are clustered at the city level. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

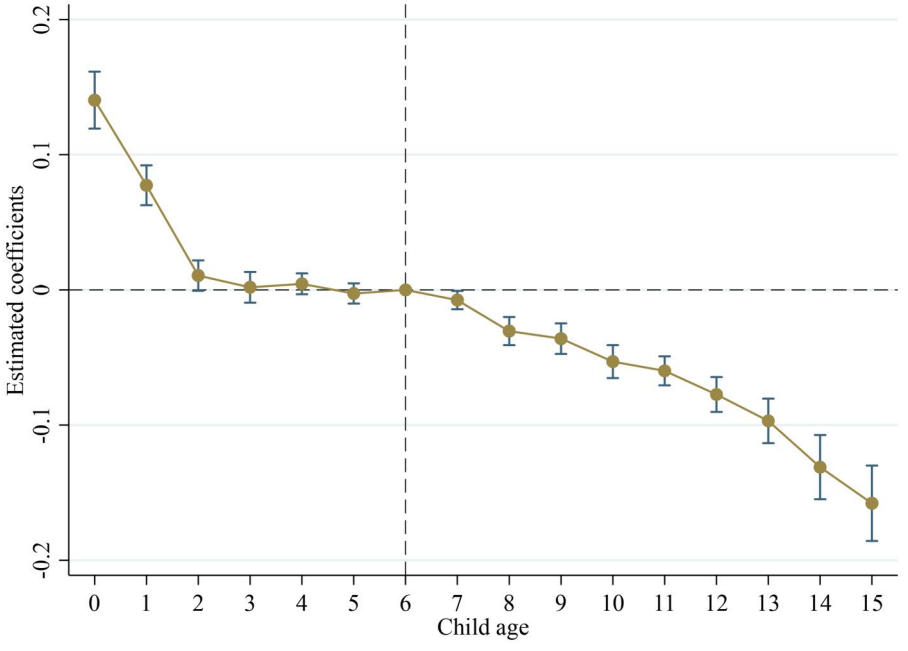


Figure 1. The effect of child age on migration accompaniment probability.
Notes: This figure presents the estimated effects (coefficients with 95% confidence intervals) of child age on the probability of migrating with parents (*Cmig*), based on 2011–2018 CMDS data. Age-specific dummy variables are used as explanatory variables, with six-year-olds as the reference group. Regressions include city and year fixed effects, as well as relevant control variables, with standard errors clustered at the city level.

migrates with parents, zero otherwise, with six-year-olds—the typical school-entry age—as the reference. Figure 1 highlights three patterns. First, children under one year are significantly more likely to migrate than six-year-olds. Second, children aged two to five show similar migration probabilities to six-year-olds. Third, for ages seven to fifteen, co-migration probabilities

decline sharply. These results indicate that reaching school age substantially lowers children's likelihood of migrating with parents, providing empirical support for the instrument based on the school-entry cut-off.

4.2.2. Exclusion restriction. The exclusion restriction requires that the instrument affects migrants' settlement intentions only through children's co-migration. We justify this both institutionally and empirically. Institutionally, childbirth timing in China is largely determined by biological factors and short-term household circumstances, especially for rural migrants facing employment instability and *hukou*-related uncertainty. Birth timing is not linked to access to urban public services, *hukou* eligibility, or other policies directly affecting settlement decisions, making alternative channels unlikely.

Empirically, we conduct robustness and placebo tests. First, to address concerns that birth timing proxies for parental characteristics, we test correlations with observable settlement-planning proxies, including local social security card possession and alignment with local daily habits; no systematic associations are found (Appendix Table A1, Columns 1–2). Second, to check for labour or income disruptions, we examine whether the instrument predicts household income changes or employment difficulties; results show no significant effects (Columns 3–4). Third, to test potential social-integration channels, we assess whether birth timing influences participation in local organisations (unions, volunteer groups, alumni/hometown associations, chambers of commerce); Column 5 shows no systematic association, supporting the exclusion restriction.

4.2.3. Robustness and sensitivity analyses. We further test the robustness of the instrumental-variable estimates across several dimensions. First, re-estimating the 2SLS model using narrower age windows—6–8, 3–11, and 0–14—shows that children's co-migration continues to positively and significantly affect migrants' long-term settlement intentions (Appendix Table A2, Columns 1–3). Second, restricting the sample to children born within tighter birth-month windows around the September school-entry cut-off (May-December, June-November, July-October) yields estimates closely matching the baseline (Appendix Table A2, Columns 4–6), indicating results are not driven by broader seasonal fertility patterns.

Third, to rule out confounding between children's birth timing and parental migration, we limit the sample to children born before parents migrated; estimates remain quantitatively and qualitatively similar (Appendix Table A2, Columns 7–8). Using only birth-month variation while controlling for age (Columns 9–10) also produces results consistent with the baseline.

Finally, applying the plausibly exogenous framework of Conley, Hansen, and Rossi (2012) with a conservative range for potential direct effects, $\delta \in [-0.005, 0.005]$, the union of 90% confidence intervals remains above zero (Appendix Figure A1), confirming that the positive effect of children's co-migration on long-term settlement intentions is robust even under modest violations of the exclusion restriction.

4.3. Other robustness checks

To assess robustness, we conduct multiple checks. Across all specifications, children's co-migration consistently increases migrants' long-term settlement intentions, confirming the stability of the baseline results.

First, we use alternative measures of settlement intentions: (i) an ordered measure of settlement intensity, (ii) an indicator for permanent settlement, (iii) homeownership, and (iv) willingness to transfer *hukou* if eligible. Results in Supplementary Materials Table B2 remain positive and significant.

Second, we vary the definition of children's co-migration, using the status of the second child, all children, or the share of accompanying children. Coefficients remain stable in sign and significance (Supplementary Materials Table B3).

Third, to address selection, we apply propensity score matching using extensive individual, household, and regional covariates. Matching improves balance, and re-estimated models yield results similar to the baseline (Supplementary Materials Table B4).

Fourth, we apply sample restrictions to reduce confounding, excluding (i) non-employee migrants, (ii) top-income households, (iii) megacity residents, (iv) households with local *hukou*, and (v) households with a non-migrating spouse. Effects remain statistically and economically significant (Supplementary Materials Table B5).

Finally, controlling for contemporaneous *hukou* policy shocks following An et al. (2024) does not materially alter the estimates (Supplementary Materials Table B6).

Overall, these robustness checks indicate that our findings are insensitive to outcome measures, variable definitions, sample selection, matching procedures, and policy controls, reinforcing the robustness of the positive effect of children's co-migration on long-term settlement intentions.

5. Mechanism analysis

This section examines the mechanisms through which children's co-migration affects rural migrants' long-term settlement intentions. Building on the theoretical framework, we consider four potential channels: educational opportunities, economic returns, subjective well-being, and social integration. Our analysis proceeds in three steps: first, we provide descriptive evidence on migrants' stated reasons for settlement; second, we empirically test the education channel and the moderating role of *hukou* institutions; third, we systematically assess alternative explanations.

5.1. Mechanism framework and descriptive evidence

To motivate the mechanism analysis, we draw on the 2017 CMDS question: 'What is your main reason for planning to stay in the current city?' Responses are grouped into four categories: education-related, work-related, living-related, and identity-related reasons. Figure 2 plots the distribution of these motives by children's migration status.

A striking pattern emerges. Migrants who bring their children are substantially more likely to report education-related motives, while differences across other categories are limited. In particular, education dominates the stated settlement motives among migrants with accompanying children, whereas work-related, living-related, and identity-related reasons exhibit only modest variation across groups. This descriptive evidence suggests that education is the most salient channel linking children's co-migration to settlement intentions, motivating a more rigorous examination below.

5.2. Educational opportunities and institutional constraints

We begin by formally testing whether access to education constitutes the primary mechanism. Migrant families with accompanying children tend to locate in neighbourhoods with better school quality or closer proximity to schools, thereby improving children's educational opportunities. From an intertemporal perspective, access to high-quality urban education increases expected returns to children's human capital investment, raising the perceived long-term benefits of remaining in the destination city and strengthening incentives for permanent settlement.

To examine this mechanism, we first compare migrants with and without accompanying children in terms of their likelihood of reporting education as the primary settlement motive. As

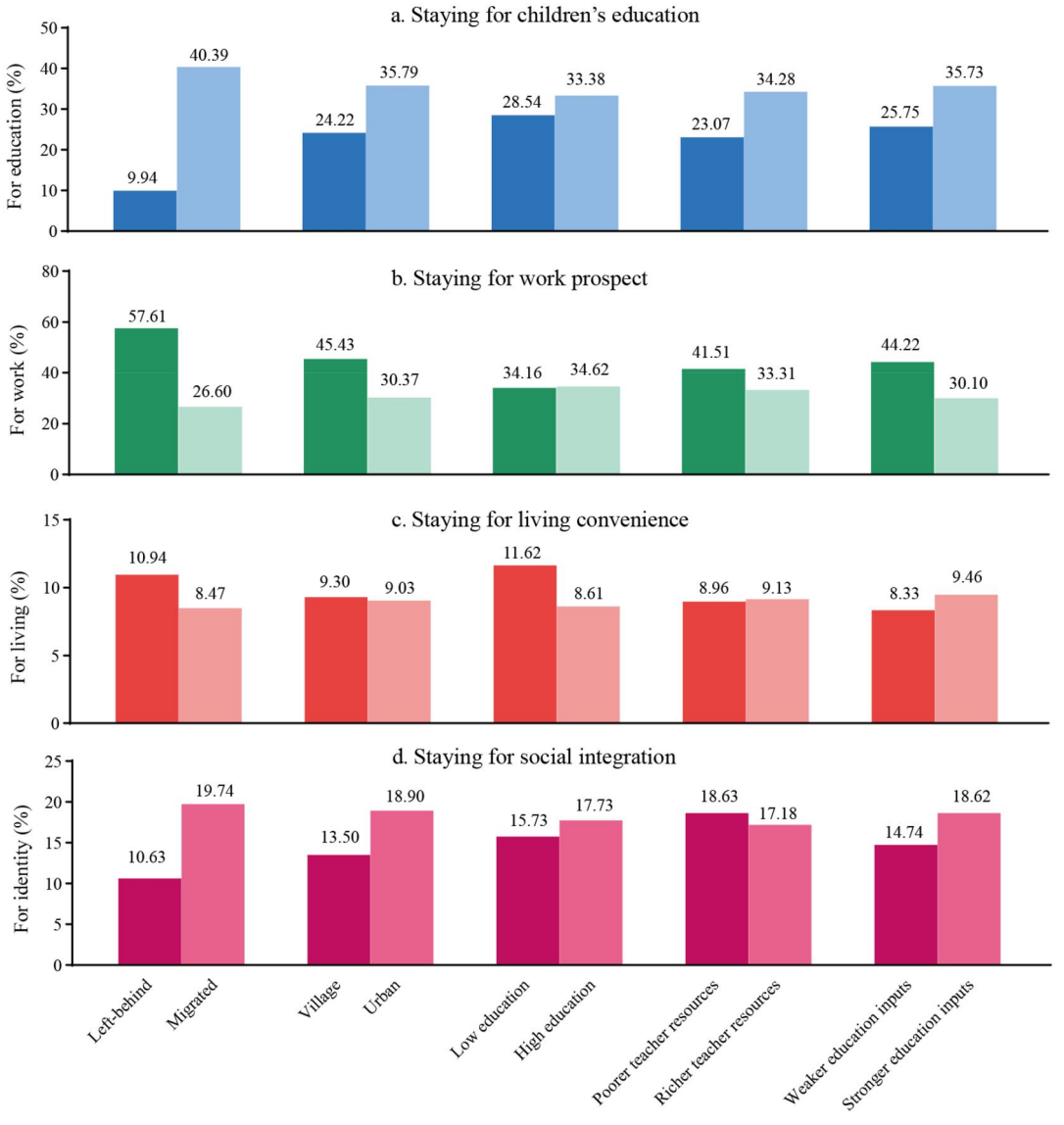


Figure 2. The distributions of primary reasons for settlement intentions.
Notes: This figure depicts the distribution of primary reasons for long-term settlement intentions among the rural migrants, using data from the 2017 China Migrants Dynamic Survey (CMDS). The horizontal axis reports different subgroup classifications. The vertical axis shows the percentage of respondents whose primary reason for planning to stay in the destination city falls into one of four categories: education-related reasons (e.g. better educational opportunities for children), work-related reasons, living-related reasons, and identity-related reasons.

shown in Figure 2, 40.39% of migrants who migrate with children cite better educational opportunities as the main reason for staying, compared with only 9.94% among those without children. This large gap indicates that children's co-migration substantially reshapes settlement decisions through education-related considerations.

We further assess whether this education mechanism depends on local educational conditions and household characteristics. Specifically, we conduct subgroup analyses along three dimensions: neighbourhood type (residents' committees versus village committees), migrants' educational attainment, and relative educational resource endowments between destination and

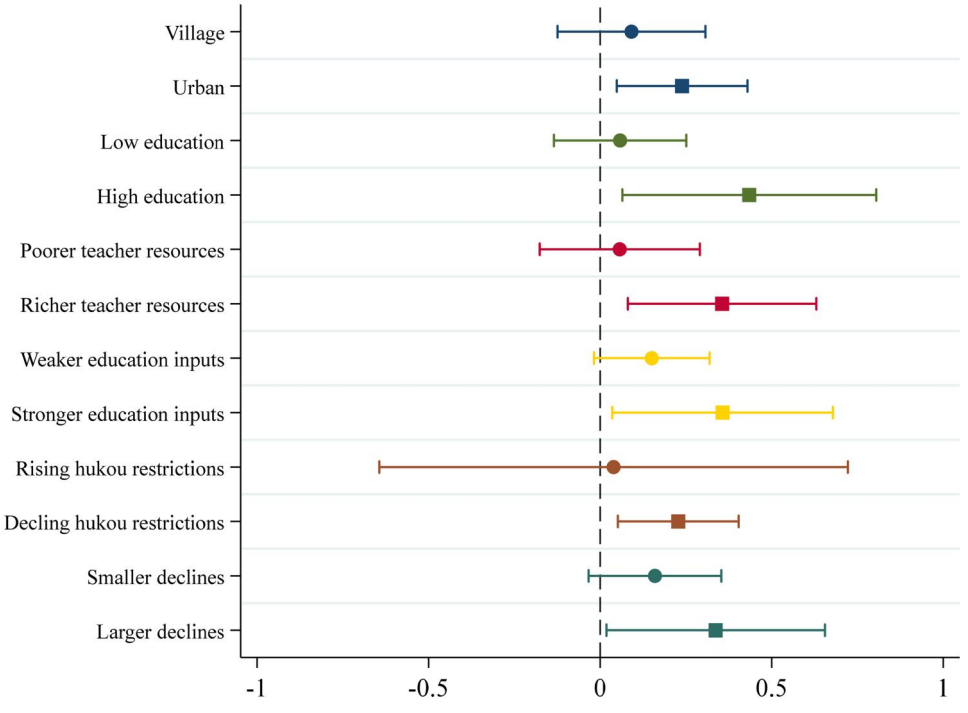


Figure 3. Heterogeneous regression results for mechanism analysis.
Notes: This figure plots the estimated effects (coefficients and 99% confidence intervals) for the impact of children's migration status on the long-term settlement intentions of the rural migrants, allowing for heterogeneity across neighbourhood type, educational attainment, educational resource endowments, and *hukou* settlement thresholds. The estimates are obtained using a two-stage instrumental variables (IV) approach based on data from the 2012 and 2014–2018 waves of the China Migrants Dynamic Survey (CMDS). All specifications include city fixed effects, year fixed effects, and control variables. Standard errors are clustered at the city level.

origin provinces, measured by differences in student-teacher ratios and education fiscal spending[4]. Across all dimensions, migrants are significantly more likely to settle for educational reasons when local school quality is higher, parental education is stronger, and destination regions exhibit richer educational inputs. These patterns provide consistent evidence that both educational accessibility and educational quality underpin the settlement effect of children's co-migration.

Building on these findings, we conduct corresponding heterogeneity analyses of settlement intentions. Figure 3 shows that the estimated effect of children's co-migration is positive and significant in neighbourhoods with better school resources, among more educated migrants, and in destination provinces with stronger educational endowments. In contrast, the effect is statistically insignificant in settings characterised by poor school quality or weak educational inputs. Interaction regressions reported in Appendix Table A3 further confirm that the settlement effect of children's co-migration is amplified by favourable educational conditions. Together, these results identify education as the central mechanism through which children's co-migration promotes long-term settlement, confirming Hypothesis 2.

5.3. Hukou restrictions as a moderating institutional force

While access to education is crucial, institutional barriers may limit its impact. In China, public education access for migrant children is closely linked to the household registration (*hukou*)

Table 3. Mechanism analysis: *Hukou* restrictions

	(1) Settle	(2) Settle
Cmig	0.2212***	0.8977**
	(0.0663)	(0.4274)
Hidx	−0.0005*	0.0065*
	(0.0003)	(0.0039)
Cmhid		−0.0091*
		(0.0051)
Control variables	Yes	Yes
City FE	Yes	Yes
Year FE	Yes	Yes
N	228042	228042
R^2	0.1831	0.0684

Notes: This table presents mechanism analysis for the impact of children's migration status on the long-term settlement intentions of the rural migrants, accounting for the effects of household registration (*hukou*) thresholds. The analysis employs a two-stage instrumental variables (IV) approach using data from the 2012 and 2014–2018 China Migrants Dynamic Survey (CMDS). The interaction term (*Cmhid*) is constructed by multiplying the child migration variable (*Cmig*) with the *hukou* threshold variable (*Hidx*). All regressions include city fixed effects, year fixed effects, and control variables. Standard errors are clustered at the city level. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

system, and stricter *hukou* requirements reduce eligibility for local services, weakening the returns to child co-migration.

We capture this constraint using the city-level *hukou* settlement threshold index from Chen et al. (2024)[5]. Table 3 shows that stricter *hukou* thresholds significantly lower settlement intentions among families with children. The interaction between *hukou* restrictions and children's co-migration is also significantly negative, indicating that institutional barriers attenuate the positive effect of child co-migration on settlement.

To assess recent policy changes, we exploit variation in *hukou* threshold adjustments following the 2014 reform. Re-estimating the model for cities with declining versus non-declining thresholds, and for larger versus smaller reductions, Figure 3 shows that the positive settlement effect is concentrated in cities where *hukou* barriers were relaxed. These findings highlight that institutional access to education critically shapes the settlement benefits of children's co-migration. The evidence thus supports Hypothesis 3.

5.4. *Assessing alternative mechanisms*

We next investigate whether other channels—household income, life satisfaction, or identity recognition—can explain the observed settlement effect. Descriptively, Figure 2 shows that migrants with accompanying children are less likely to report work-related motives for staying than those without children, and these patterns are the opposite of those observed for education-related motives. Moreover, the importance of living-related and identity-related reasons varies little across different groupings. This evidence suggests that these channels are unlikely to be dominant.

We formally test these alternatives using regression analyses. Columns (1)–(2) of Table 4 examine the impact of children's co-migration on household income and subjective well-being, with coefficients small and statistically insignificant, indicating no meaningful effect. Columns (3)–(7) assess identity recognition, measured by migrants' self-identification with the destination city and perceived acceptance by local residents; again, no significant effects are found.

Table 4. Household income, life satisfaction and identity recognition

	(1) Lninch	(2) Happy	(3) Like	(4) Focu	(5) Integ	(6) Acce	(7) Disc
Cmig	−0.1585	−0.0802	0.0205	0.0308	0.0664	0.0751	−0.0311
	(0.1002)	(0.0528)	(0.0266)	(0.0325)	(0.0455)	(0.0493)	(0.0930)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes
City FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	228192	80680	63925	63909	63906	63925	63883
R^2	0.2196	0.1031	0.0102	0.0182	0.0389	0.0318	0.0639

Notes: This table reports IV-based mechanism analyses of children's co-migration on migrants' household income, life satisfaction, and identity recognition using CMDS data. Columns (1)–(2) examine income (log of monthly household income) and subjective well-being (1 if 'happy' or 'very happy' vs. hometown). Columns (3)–(7) assess identity recognition via five indicators: liking the city, attention to local changes, willingness to integrate, perceived acceptance, and perceived discrimination (1 if agree/strongly agree). All regressions use a two-stage IV approach with city fixed effects, year fixed effects, and control variables. Standard errors are clustered at the city level.

Taken together, these results systematically rule out economic returns, subjective well-being, and identity recognition as primary mechanisms. Instead, the evidence consistently points to children's education—shaped and constrained by *hukou* institutions—as the main channel through which children's co-migration enhances rural migrants' long-term settlement intentions.

6. Heterogeneity analysis

Since migrants differ in preferences for children's education, access to public services, and tolerance for economic and psychological costs, the average effect of children's co-migration may mask substantial heterogeneity. We therefore examine heterogeneity along three dimensions: child gender, employment formality, and destination location.

6.1. Child gender and regional culture

Son preference remains strong in China, especially among rural-origin households. As a result, parental investment and long-term planning often favour sons. We examine whether the settlement effect of children's co-migration varies by gender.

Columns (1)–(2) of Table 5 show that the coefficient on co-migration (*Cmig*) is larger and more precise for sons, indicating a stronger positive effect on parents' long-term settlement intentions. To capture regional variation in gender norms, we use two historical proxies for Confucian influence in migrants' *hukou* regions: chastity arch density and genealogical records per million people. Splitting the sample by the median and interacting *Cmig* with a male-child indicator (*Cmal*), Columns (1)–(4) of Appendix Table A4 show the interaction is significantly positive only in regions with stronger Confucian markers. This indicates that cultural norms amplify the settlement effect of migrating with sons while diminishing the influence of daughters.

6.2. Employment formality and destination location

We next examine heterogeneity by employment formality and destination location. Employment formality captures job stability, income security, and access to social protection,

Table 5. Heterogeneity analysis

	(1) Daughters	(2) Sons	(3) Informal	(4) Formal	(5) Non-Eastern	(6) Eastern
Cmig	0.1476**	0.2971***	0.0806	0.3852***	0.1788	0.2197***
	(0.0750)	(0.0922)	(0.0752)	(0.1040)	(0.1648)	(0.0718)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes
City FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
N	106769	121423	133343	94849	110603	117589
R^2	0.1824	0.1767	0.1593	0.1938	0.1587	0.2105

Notes: This table reports IV-based heterogeneity analyses of the effects of children's co-migration on rural migrants' long-term settlement intentions, focusing on child gender, parental employment formality, and destination location. The analysis uses data from the 2012 and 2014–2018 China Migrants Dynamic Survey (CMDS). All regressions include city fixed effects, year fixed effects, and control variables. Standard errors are clustered at the city level. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

which may condition whether child co-migration translates into long-term settlement. We classify employment in public institutions, state-owned enterprises, and registered firms as formal, and self-employment and individual businesses as informal.

Columns (3) and (4) of Table 5 show that child co-migration significantly increases settlement intentions among migrants in formal employment but has no significant effect for those in informal jobs. This indicates that stable employment is a key precondition for transforming child co-migration into credible settlement plans.

We further divide destinations into eastern and central-western regions. Columns (5) and (6) of Table 5 indicate that the positive effect of children's co-migration is significant only in eastern regions, which are characterised by stronger labour markets, better public services, and higher-quality educational resources. In contrast, the effect is markedly weaker in central and western regions with more limited economic opportunities.

Overall, these results underscore the importance of son preference, labour-market institutions and regional development in shaping the settlement response to child co-migration. Children's co-migration is most likely to promote long-term settlement when supported by stable employment and favourable regional environments.

7. Conclusions and policy implications

As China advances towards people-centered urbanisation, rural-urban migration is increasingly characterised by a shift from individual labour mobility to family-based relocation. In this context, understanding how children's co-migration shapes migrants' settlement decisions is crucial. Using nationally representative data from the China Migrants Dynamic Survey (CMDS, 2012, 2014–2018) and a two-stage least squares (2SLS) framework, this study provides causal evidence on the role of children's co-migration in shaping long-term settlement intentions within China's *hukou*-based institutional environment.

The results show that migrating with children significantly strengthens migrants' willingness to settle permanently in destination cities, indicating a transition from short-term, reversible migration towards longer-term, family-oriented decision-making. This effect operates primarily through improved access to urban educational resources. When migrant children are able to enrol in higher-quality and more stable educational systems, households' expected returns to long-term urban residence increase substantially. However, this positive effect is markedly constrained by *hukou*-related institutional barriers. Restrictions on access to public education—

particularly at higher educational stages and in key examinations—introduce uncertainty into children's future development paths, thereby weakening incentives for permanent settlement. By contrast, factors such as household income, life satisfaction, and identity recognition play a comparatively limited role, underscoring the dominant importance of institutional conditions and public service access in shaping migration outcomes.

Taken together, these findings point to an intergenerational mechanism underlying rural-urban migration. Settlement decisions are increasingly driven by forward-looking investments in children's human capital rather than by short-term income considerations alone. At the same time, the effectiveness of this mechanism depends critically on the institutional environment, particularly the extent to which migrants can access stable and equitable public services. This perspective contributes to the literature by integrating family-based migration behaviour with institutional constraints and public service provision, offering a more comprehensive understanding of the micro-foundations of urbanisation in developing economies.

The policy implications of these findings are threefold. First, further reform of the household registration system should prioritise the equalisation of access to public services rather than merely relaxing entry thresholds. Building on the ongoing reforms since 2014, large and mega cities could reduce reliance on rigid eligibility criteria—such as continuous social insurance contributions or housing conditions—and establish more transparent and predictable access rules for migrant families, especially in compulsory education and social security. Such reforms are crucial for reducing institutional uncertainty, which, as our results suggest, directly weakens migrants' incentives for long-term settlement.

Second, expanding both the supply and accessibility of public education for migrant children is essential. Given that education constitutes the primary channel through which children's co-migration affects settlement decisions, local governments should increase investment in public school capacity, particularly in areas with high concentrations of migrant populations, and reduce administrative barriers to enrolment. Enhancing the portability of student records and examination eligibility across regions would further ensure continuity in educational trajectories and strengthen households' expected returns to long-term urban residence.

Third, urban development strategies should adopt a more inclusive and family-oriented approach. While existing policies often emphasise attracting skilled labour through material incentives, migrants' settlement decisions are increasingly shaped by intergenerational considerations. Strengthening public education provision, social services, and community integration mechanisms for migrant families can therefore help align urban development policies with the long-term human capital investment motives identified in this study, thereby promoting more sustainable urbanisation.

These findings may also have broader relevance beyond China. In many developing countries, internal migration is similarly shaped by unequal access to public services and institutional barriers, suggesting that policies aimed at improving service accessibility—particularly in education—can play a critical role in facilitating long-term settlement and inclusive urbanisation.

This study has several limitations. The cross-sectional nature of the CMDS data limits the ability to control for unobserved individual heterogeneity, and the focus on long-term settlement intentions may not fully capture short-term or circular migration dynamics. Future research using longitudinal data could further explore the dynamic interactions between family migration, institutional reform, and urban integration outcomes. Despite these limitations, this study provides robust evidence on the intergenerational and institutional drivers of migration decisions, offering valuable insights for policies aimed at promoting inclusive and sustainable urbanisation in China.

Notes

1. The New Economics of Labour Migration (NELM) – established by Stark and Bloom (1985) – frames migration as a household strategy for risk management and income diversification where market institutions are weak or incomplete.

2. The "two main responsibilities" (*liang wei zhu*) principle, instituted in 2001, stipulated that local governments in migrant-receiving areas assume primary responsibility for administering compulsory education for migrant children, with full-time public schools serving as the primary channel for their schooling.
3. Detailed definitions of all variables are provided in Supplementary Materials Table B1.
4. For specific definitions, see Supplementary Materials Table B1.
5. The settlement threshold index is a panel dataset quantifying the stringency of local *hukou* policies across 332 Chinese cities from 1996 to 2024. A higher index value indicates stricter registration restrictions.

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Author contributions

CRediT: **YANGYANG WANG**: Data curation, Formal analysis, Methodology, Writing – original draft, Writing – review & editing; **SHUJIE YAO**: Conceptualization, Funding acquisition, Project administration, Supervision; **LEI AN**: Funding acquisition, Methodology, Supervision, Writing – review & editing.

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Appendix

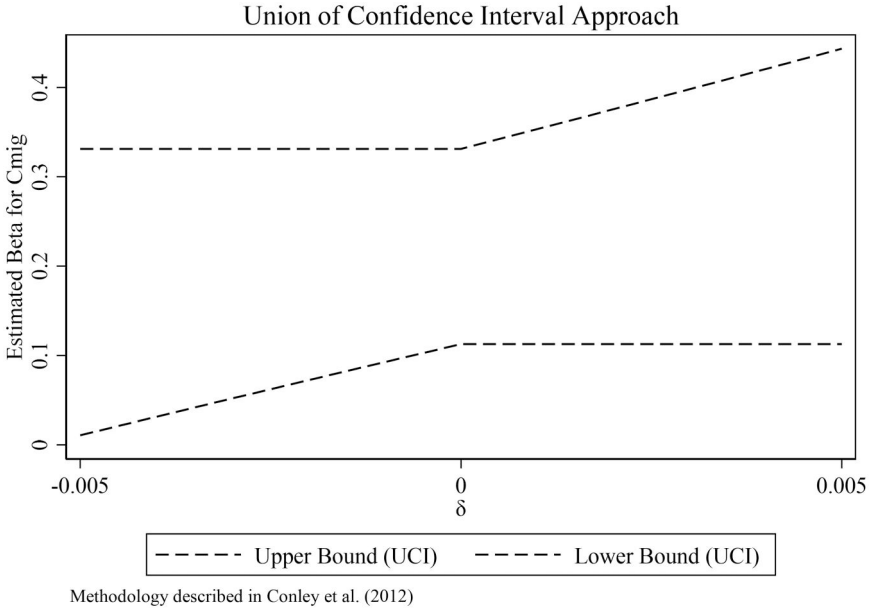


Figure A1. Sensitivity analysis.
Notes: This figure presents a sensitivity analysis using the Union of Confidence Interval (UCI) approach proposed by Conley et al. (2012). The horizontal axis plots the hypothesised magnitude of the direct effect of the instrumental variable (*Z*) on long-term settlement intentions (*Settle*). The vertical axis shows the corresponding coefficient of child migration on long-term settlement intentions (*Settle*). The dashed lines depict the upper and lower bounds of the 90% confidence intervals.

Table A1. Exclusion restriction test of the instrumental variable

	(1) Scard	(2) Diff	(3) Incg	(4) Empd	(5) Parti
Z	−0.0069	−0.0015	−0.0100	−0.0038	0.0145
	(0.0076)	(0.0062)	(0.0067)	(0.0072)	(0.0088)
Control variables	Yes	Yes	Yes	Yes	Yes
City FE	Yes	Yes	Yes	Yes	Yes
N	29845	29845	29360	29845	34122
R^2	0.2041	0.0655	0.0466	0.1067	0.1468

Notes: This table reports IV estimates of the instrument's impact on migrants' settlement capacity using the 2017 CMDS. Column (1) uses a personal social security card indicator (*Scard*). Column (2) captures agreement that hygiene habits differ from locals (*Diff*). Column (3) measures increased monthly income relative to the previous year (*Incg*). Column (4) indicates difficulty finding stable employment (*Empd*). Column (5) reflects participation in local organisations since 2016, including unions, volunteer groups, alumni associations, hometown associations, or chambers of commerce (*Parti*). All regressions include city fixed effects and controls; standard errors are clustered at the city level.

Table A2. Robustness and sensitivity analyses of the identification strategy

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
							Before parental migration		Controlling for child age	
	Aged 6–8	Aged 3–11	Aged 0–14	May–December	June–November	July–October	OLS	2SLS	OLS	2SLS
Cmig	0.3719**	0.1699**	0.2117***	0.1919**	0.1420*	0.1565*	0.1647***	0.1534**	0.1578***	0.2955**
	(0.1833)	(0.0827)	(0.0689)	(0.0756)	(0.0810)	(0.0899)	(0.0055)	(0.0686)	(0.0056)	(0.1148)
Cage									−0.0010**	0.0007
									(0.0005)	(0.0016)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
City FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	52197	145453	216248	153835	116079	78288	166022	166022	228192	228192
R^2	0.1695	0.1919	0.1848	0.1858	0.1882	0.1899	0.1931	0.1930	0.1862	0.1710

Notes: This table reports IV estimates of the effect of children's migration status on rural migrants' long-term settlement intentions using 2012 and 2014–2018 CMDS data. Columns (1)–(3) show results by child age (6–8, 3–11, 0–14), (4)–(6) by birth-month windows (May-Dec, June-Nov, July-Oct), (7)–(8) for children born before parental migration (OLS in 7; IV in 8), and (9)–(10) add child age as a control (OLS in 9; IV in 10). All regressions include city and year fixed effects plus controls; standard errors are clustered at the city level. ***, **, and * denote significance at 1%, 5%, and 10%.

Table A3. Mechanism analysis: Educational quality

	(1) Type	(2) Settle	(3) Std	(4) Settle	(5) Fed	(6) Settle	(7) Settle
Cmig	0.2971***	−0.0474	0.2172***	−0.0473	0.1293*	−0.0543	−1.2453***
	(0.0809)	(0.0934)	(0.0725)	(0.0782)	(0.0777)	(0.0662)	(0.3554)
Cmty		0.4253***					
		(0.1518)					
Cmst				0.4348***			
				(0.1502)			
Cmfe						0.6437***	
						(0.1834)	
Cmed							0.1406***
							(0.0347)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes
City FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	228192	228192	204168	204168	204168	204168	228192
R^2	0.1870	0.1390	0.2443	0.1314	0.5222	0.0501	0.0528

Notes: This table reports IV-based mechanism analysis of children's co-migration on rural migrants' settlement intentions, focusing on neighbourhood type, educational resources, and parental educational attainment, using 2012 and 2014–2018 CMDS data. Columns (1), (3), and (5) use as dependent variables: neighbourhood type (*Type* = 1 for neighbourhood committees), student-teacher ratio (*Std* = 1 if destination ≤ *hukou* region), and education fiscal input (*Fed* = 1 if destination ≥ *hukou* region), respectively. Interaction terms (*Cmty*, *Cmst*, *Cmfe*) are *Cmig* × mechanism variables. *Cmed* is the interaction term between children's migration (*Cmig*) and parental years of education (*Edu*). Regressions include city, year fixed effects and controls; standard errors clustered at the city level. ***, **, and * denote 1%, 5%, and 10% significance.

Table A4. Heterogeneity analysis: Child gender and regional culture

	(1) Fewer chastity arches	(2) More chastity arches	(3) Fewer genealogical records	(4) More genealogical records
Cmcm	−0.1322	0.2970*	−0.2293	0.2017*
	(0.2256)	(0.1797)	(0.7172)	(0.1171)
Cmig	0.4513***	0.0404	0.7062	0.0139
	(0.1552)	(0.1126)	(0.4395)	(0.0886)
Cmal	0.1013	−0.2067	0.1775	−0.1392*
	(0.1679)	(0.1280)	(0.5422)	(0.0830)
Control variables	Yes	Yes	Yes	Yes
City FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
N	94599	109569	86435	117733
R^2	0.1495	0.1563	0.0538	0.1722

Notes: This table presents IV-based heterogeneity analysis of children's co-migration on rural migrants' long-term settlement intentions, focusing on child gender and regional cultural context, using 2012 and 2014–2018 CMDS data. Columns (1)–(4) report results for subsamples defined by below-versus above-median numbers of chastity arches and genealogical records in migrants' *hukou* regions. The interaction term (*Cmcm*) is *Cmig* × *Cmal*. Regressions include city and year fixed effects and controls; standard errors clustered at the city level. ***, **, and * denote 1%, 5%, and 10% significance.