Vilnius University Press

Content lists are available at Vilnius University Press

Transformations In Business & Economics
2026, Vol. 25 No 1 (67), pp.214-233.

ISSN 1648-4460; E-ISSN 2538-872X
https://doi.org/10.15388/Tibe.2026.25.1.11

Chapter: Fostering Transformative Shifts in Sustainability and Environmental Behaviour

EXPLORING THE INFLUENCE OF EQUITY PERCEPTION ON HOMESTEAD WITHDRAWAL INTENTION OF FARMERS: AN EMPIRICAL INVESTIGATION

Xiaogang Zhu
E-mail: zhxg_1011@126.com
ORCID: https://orcid.org/0009-0001-6440-398X
Affiliation 1: College of Civil Engineering and Intelligent Construction, Henan Open University, China
ROR: https://ror.org/03qap3c82

E-mail: zhxg_1011@126.com
ORCID: https://orcid.org/0009-0001-6440-398X
Affiliation 2: Henan Province Intelligent Green Construction Engineering Research Center, Henan Open University, China
ROR: https://ror.org/03qap3c82

Xuan Zhang
E-mail: axm0713@126.com
ORCID: https://orcid.org/0009-0004-3362-3471
Affiliation: College of Civil Engineering and Intelligent Construction, Henan Open University, China
ROR: https://ror.org/03qap3c82

Annotation. Promoting the orderly withdrawal of idle homesteads is a key strategy for optimizing the allocation of urban and rural land resources and advancing rural revitalization. A crucial factor in this process is the intentions of farmers. Previous studies have investigated the factors influencing the withdrawal intention of farmers from multiple perspectives, such as risk perception, family characteristics, resource endowment, and operational mechanisms. However, systematic empirical research on the compensation standards that farmers are most concerned about, particularly the underlying mechanisms of equity perception, is lacking. Therefore, a three-dimensional (reasonable consideration–horizontal equity–vertical equity) analytical framework was constructed based on Adams's Equity Theory. An empirical analysis was conducted using a binary Logit model, drawing on survey data from 1236 questionnaires involving farmers in rural areas of Henan Province. Results reveal the following: (1) Farmers display high sensitivity to equity in withdrawal decision-making, with equity perceptions across all three dimensions being positively correlated with withdrawal intention. (2) Compared with the absolute amount of compensation, farmers place greater importance on "relative equity" (horizontal equity and vertical equity). (3) Among the control variables, rural household registration, degree of policy awareness, and presence/absence of a town house are significantly positively correlated with withdrawal intention, while age, dependence on agricultural income, and homestead remoteness are negatively correlated with withdrawal intention. Accordingly, policy recommendations include the introduction of a third-party assessment, formulation of graded compensation standards, and diversification of compensation modes. These recommendations aim to effectively facilitate the orderly withdrawal of idle homesteads by strengthening the positive equity perception of farmers. Overall, this study provides a theoretical basis and empirical support for improving homestead withdrawal compensation policies and offers valuable insights for promoting rural land system reforms.

Keywords: Homestead, equity perception, equity theory, withdrawal intention, Logit model.

Submitted on July 2025. Accepted on January 2026.

JEL classification: Q15, O13, D63, R14.

Introduction

As a nonrenewable basic natural resource, land serves as the material foundation and spatial carrier for sustainable economic and social development. However, with rapid urbanization, the migration of a large rural population to urban areas contributes to a structural imbalance between urban and rural land resources. The increasing demand for urban construction land coexists with a large number of idle homesteads, and the mismatch between urban and rural land resources has become a prominent obstacle to social and economic development (Zheng, 2025). A common challenge faced by many developing countries and transitional economies lies in the revitalization of "sleeping" homestead assets and their transformation from idle means of subsistence into mobile production factors. As an active practitioner in this field, China is undertaking rural land reforms to address the obstructed flow of urban and rural factors and resources, realize optimal land resource allocation, and promote the integrated development of urban and rural areas. A crucial part of this practice involves encouraging farmers to voluntarily withdraw from idle homesteads in exchange for compensations. In this process, as homestead owners and the primary decision-makers, farmers play a crucial role in determining the effectiveness of policy implementation. Therefore, accurately identifying the key factors that affect the withdrawal decision of farmers is crucial to the establishment of an incentive mechanism considering efficiency and equity, ultimately realizing the macro-policy goal of optimal land resource allocation. The conclusions drawn from the case study in China offer valuable insights and experiences that can guide similar initiatives in other countries and regions, while also informing the continuous practice of homestead withdrawal in China.

Focusing on stimulations of the withdrawal intention of farmers and revitalization of homestead resources, systematic analytical frameworks have been established within the academic circles from three dimensions: withdrawal subject, withdrawal object, and withdrawal intermediary. From the level of withdrawal subject, scholars have mainly concentrated on micro-factors, which include the interest appeal of farmers, family income level, risk perception, and generation gap. Homestead withdrawal means relinquishing existing assets; as rational economic agents, farmers certainly expect to acquire corresponding compensation. Core factors influencing their withdrawal intentions involve the reasonableness and fairness of this compensation (Zeithaml, 1988; Grönroos, 1997; Lv *et al.,* 2019). Withdrawing from homesteads and moving to cities exposes farmers to enormous uncertainties attributed to changes in their living environment, and the resulting risk perception strongly inhibits their withdrawal intention (Blaylock, 1985; Didla *et al*., 2009; Jin *et al*., 2023). These risks mainly originate from increasing living costs and unstable livelihoods (Zhang *et al*., 2021). Family endowments of farmers are also key factors affecting their withdrawal intention. For instance, the quality of family income presents a "U"-shaped relationship with withdrawal intention (Vacca *et al*., 2024; Luo *et al*., 2024), and withdrawal intention varies according to the age structure of family members (Schuman *et al*., 2004; Liu *et al*., 2023). Considering the withdrawal object, studies have shown that the resource endowment of homesteads is a key variable influencing the withdrawal intention of farmers. The quantity and quality of occupied homesteads markedly affect withdrawal intention (Yan *et al*., 2017; Han *et al*., 2020): the quantity of homesteads shows a significantly positive correlation with withdrawal intention, while the locational conditions of homesteads also exert heterogeneous effects. Withdrawal intermediary studies aim to address micro-resistance through system design, institutional innovation, and rational compensation. Homestead withdrawal essentially involves the relinquishment of property rights, and the institutional arrangement of property rights naturally becomes a fundamental factor affecting withdrawal intention. The

ongoing reform of "separating three rights"(ownership rights, qualification rights, and use rights) for rural homesteads in China aims to optimize the rights structure of homesteads based on the realities of rural areas, promoting the orderly withdrawal of idle homesteads (Zeng *et al*., 2023). However, some studies reveal that, at the micro level, confirming homestead ownership does not necessarily enhance the withdrawal intention of farmers (Gao *et al*., 2023). Additionally, the internal operating mechanism of homestead withdrawal has gained increasing attention from the academic circles. Zhang *et al*. (2017) analyzed the dynamic mechanism of homestead withdrawal based on the push and pull theory (Lee, 1966). They found that the intention to withdraw from homesteads is mainly driven by compensation and housing security, while the thrust mainly originates from factors such as integrated utilization of land and institutional evolution. Therefore, strengthening the utility of the dynamic mechanism is of considerable importance for realizing homestead withdrawal, while the irrational compensation standard exists as the critical obstacle (Sun et al., 2022). To this end, aiming at the realization of rational compensation and the enhancement of the withdrawal intention of farmers. scholars have actively explored the multiple value decomposition of homesteads (Wu *et al*., 2022), the optimization of homestead value measurement methods (Thaler, 1980; Zhou, 2021), and the establishment of long-term gain-sharing mechanisms (Yuan, 2021). Aiming to enhance the withdrawal intention of farmers by addressing their differentiated demands (Wu *et al*., 2011), differentiated withdrawal strategies have been designed based on several dimensions, such as function extension, rural planning, and cultural demonstration (Liang *et al*., 2021), and the applicable conditions of withdrawal modes, which include asset replacement, monetary indemnity, and compensation in the form of social security benefits, have been identified (Qu *et al*., 2021). Overall, various perspectives and methods have been adopted in the existing studies. However, the decisive effect of withdrawal compensation on the withdrawal intention of farmers has been generally proven; insufficient compensation substantially inhibits their withdrawal intention, while fair and rational compensation becomes the key incentive.

Existing studies have established a solid foundation for further research; however, they demonstrate several limitations. First, although compensation is the main concerned in homestead withdrawal, it has not yet been fully investigated. In particular, while the economic rationality of compensation standards has been highlighted, the implicit, multidimensional equity perception of farmers has often been neglected. Despite the recognized importance of fair compensation, this aspect has not been deeply empirically tested within a systematic theoretical framework, failing to establish an analytical framework to examine behavioral motivations with withdrawal compensation as the core. Therefore, this study introduces Adam's Equity Theory to construct a three-dimensional (reasonable consideration, horizontal equity, and vertical equity) analytical framework. The influencing mechanism of equity perception on the withdrawal intention of farmers was then empirically analyzed using the survey data from 1236 questionnaires involving farmers in traditional rural areas of Henan Province. This empirical analysis aimed to compensate for the minimal attention on the equity perception of farmers in withdrawal intention and offer a new theoretical perspective and empirical basis for improving homestead withdrawal policies.

The novelty and contributions of this study are as follows. (1) The Equity Theory was introduced into the investigation of homestead withdrawal, a three-dimensional analytical framework was constructed, and the "multidimensional equity preference" of farmers was revealed, providing a novel theoretical perspective for understanding their complex decision-making behavior. (2) The roles of the three dimensions of equity perception were empirically quantified, revealing their substantial impact on withdrawal intention. This quantification transformed "equity" from a fuzzy concept into a clear appeal, providing an empirical basis for optimizing homestead withdrawal mechanisms.

The remainder of this study is organized as follows. Section II presents the theoretical analysis and research hypotheses. Specifically, the connotations of three-dimensional equity and their action mechanism for withdrawal intention are analyzed based on Equity Theory, and research hypotheses are proposed. Section III presents a description of the overview of the study area, data sources, and sample characteristics: the regional characteristics of traditional rural areas in Henan Province and the current homestead utilization status are introduced, and data sources and sample characteristics are then explained. Section IV performs variable selection and modeling to expound on the construction principle for the binary Logit model and the basis for variable selection. Section V presents the model and analysis results. The regression results are provided, emphasizing the core effect of the three-dimensional equity perception, and a robustness test is conducted using the Probit model. Section VI presents the discussions on the main research findings and their practical importance based on the model results. Section VII discusses the research conclusions and policy suggestions and summarizes the research findings. This section also introduces operable policy suggestions based on improved positive equity perception of farmers and reveals the limitations and research expectations.

1. Theoretical Analysis and Research Hypotheses

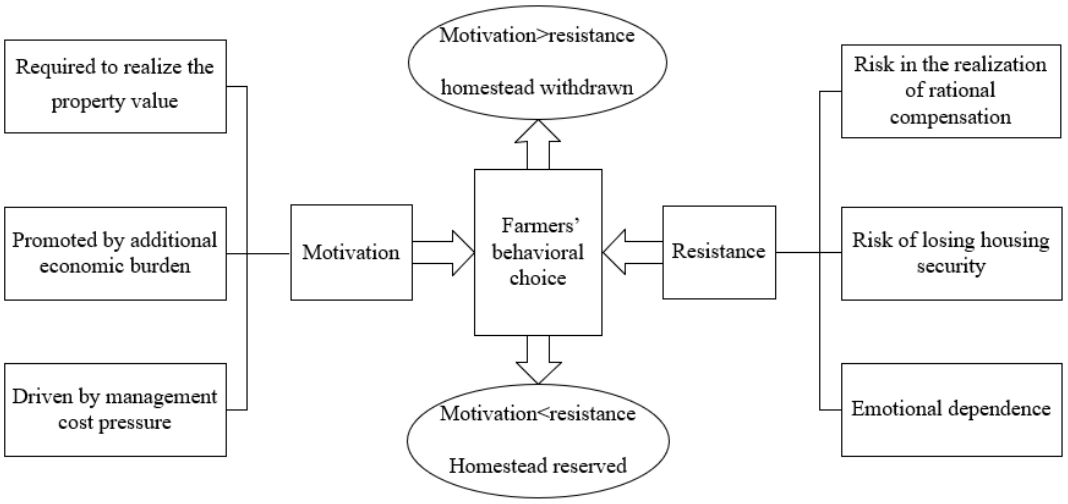
1.1 Farmers' Behavioral Logic under Bounded Rationality

Behavioral economics believes that real-world decisions are made not exactly in a manner of complete rationality; instead, final choices are affected by psychological states, social environments, and cognitive bias, among other factors (Simon, 2001). The decision of whether to withdraw from homesteads depends on how farmers trade off the possible gains and losses due to withdrawal. Farmers examine these "losses" and "gains" not only out through economic rationality but also based on their subjective perceptions of specific scenarios, personal cognition, and psychological states. Therefore, their decision-making is a behavioral choice under bounded rationality (Xia, 2016). Perceptions of "losses" and "gains" become an opposite force affecting farmers' decisions, where potential losses constitute resistance to homestead withdrawal, whereas expected benefits provide motivation. The final decision between the two finally determines farmers' choice. Therefore, analyzing the behavioral logic underlying famers' homestead withdrawal requires consideration of noneconomic factors alongside economic factors, comprehensively investigating their motivating effect on farmers' behavior.

According to surveys, the decision of farmers to withdraw is mainly driven by three factors. First, farmers seek to realize the property value of homestead resources: 60.6% of farmers with the intention to withdraw initially consider "the amount of compensation." Second, additional economic cost pressures are also crucial, including payable land-use fees under circumstances such as house renovation, maintenance cost, and scenarios involving "multiple houses for a single household." These expenses reflect output-free "pure inputs" for idle homesteads. Third, farmers encounter management cost pressures (e.g., cooperating with village collectives in rural human settlement renovation and infrastructure construction). Simultaneously, farmers typically encounter resistance from three aspects during withdrawal decision making. The first is uncertainty over rational compensation and associated risk concerns: 64.7% of the respondents focus on "whether the rational compensation can be realized." Based on farmers' understanding, rational compensation for farmers is embodied in three dimensions. (1) Reasonable consideration, indicating that compensation is assumed to cover the rights and interests relinquished through homestead withdrawal. (2) Horizontal equity refers to farmers' expectation that compensation reflects their equal rights and is not less than that received by others in comparable range. This consideration is significantly influential, as evidenced by the finding that 67.9% of the surveyed farmers' decisions are markedly affected by such comparisons. (3) Vertical equity, which indicates that

compensation should incorporate the expected future appreciation of homesteads: 68.7% of interviewed farmers express concern regarding the possible rise of homestead price after withdrawal. Farmers' pursuit of equity essentially reflects their concern about receiving fair compensation for the rights and interests associated with the withdrawn homestead, which directly decides whether the resource can be smoothly revitalized. The second source of resistance lies in the risk of losing housing security, with 78.7% of the respondents focusing on housing security problems after homestead withdrawal. The third source of resistance is emotional dependency: 33.7% of respondents are affected by village sentiment and the concept of ancestral property when deciding on whether to withdraw from their homesteads.

Therefore, from the perspective of farmers, the withdrawal from idle homesteads is mainly attributed to the needs of realizing property value, the additional economic burden, and the management cost pressure. Conversely, resistance mainly stems from the risks associated with realizing rational compensation, the risk of losing housing security, and emotional dependency. The results of the impetus–resistance game influencing farmers decisions on whether to withdraw from homesteads are displayed in Figure 1.



Source: created by the authors.

Figure 1. **Impetus–Resistance Game for Farmers' Homestead Withdrawal**

Aiming to encourage farmers to withdraw from homesteads, exploring pathways that strengthen impetus and weaken resistance from the perspective of farmers is necessary, thereby allowing impetus to win the game. The continuous promotion of urban–rural integrated development has markedly increased the property value of homesteads and intensified the expected property value of farmers. The advancement of "separating three rights" (ownership rights, qualification rights, and use rights) for rural homesteads divides the qualification right from the original right of use. This separation ensures the reconciliation of the property and guarantee functions in homestead withdrawal and allows farmers to select the degree of withdrawal flexibly according to their own needs (i.e., permanent withdrawal on the premise of acquiring the complete right and interest compensation, or temporary withdrawal with the qualification right reserved to reduce the risk of losing the housing security). The provisions in Article 62 (as aforesaid) of the *Land Administration Law of the People's Republic of China* (2019 Edition) provide a legal guarantee for farmers to realize the property value of homesteads. A sound policy environment and solid legal guarantee further encourages farmers to withdraw from homesteads. Under the driving forces of cost pressures emerging from the paid use of homesteads and the management of idle homesteads, farmers no longer a

lack the impetus to withdraw from idle homesteads. Conversely, according to the core viewpoint of loss aversion in prospect theory (Kahneman *et al*., 1979; Daniel *et al*., 1979; Didla *et al*., 2009), individuals are highly sensitive to potential losses than to expected benefits. Therefore, in withdrawal decision-making, farmers may subjectively amplify the effects of resistance. Therefore, aiming to enhance farmers' enthusiasm for homestead withdrawal, relieving their worries and concerns, weakening or eliminating the resistance, and fully releasing farmers' impetus for withdrawing from idle homesteads are all necessary. The effects of potentially losing housing security and emotional dependency have been comprehensively and systematically demonstrated in the existing studies, forming a mature explanatory framework (He *et al*., 2023; Zhang *et al*., 2025). Conversely, the influence mechanism of three-dimensional equity perceptions in withdrawal compensation on farmers' withdrawal intentions has not been systematically tested. This perspective not only conforms to the core concerns of farmers but also provides a highly operable entry point for policy optimization. Accordingly, an analysis will be implemented based on Equity Theory.

1.2 Three-Dimension Hypotheses under Equity Perception

According to property rights theory of natural resources, the clear definition and fair transaction of property rights constitute the premise for optimal resource allocation. Homestead withdrawal involves the transfer of farmers' bundle of land rights and must therefore follow the principle of equivalent exchange. Aiming to comprehensively understand the farmers' subjective perception in this process of "equivalent exchange," Adam's Equity Theory (Adams, 1963; Adams, 1965) is introduced in this study. Equity Theory is an incentive theory that explores the relationship between human motivation and perception. This theory holds that the degree of employee motivation stems from their subjective assessment of the reward-to-pay ratio between themselves and the reference object. The core view is that the enthusiasm of employees depends on their perceived sense of equity in distribution, which is based on comparisons along three dimensions: the comparison between "reward and pay"; and the comparison between oneself and others in the "reward-to-pay ratio," including horizontal spatial dimension and vertical temporal dimension comparisons. These dimensions closely coincide with the "rational compensation" expected by farmers in the investigation (i.e., "reasonable consideration," "horizontal equity," and "vertical equity"). Based on Equity Theory, by replacing employees' remuneration with withdrawal compensation and substituting farmers' rights transfer and benefit losses for employees' labor, the following hypotheses are proposed, drawing from the previous analysis and the three dimensions of the "sense of equity":

H_1: Reasonable consideration perception is significantly positively correlated with withdrawal intention.

When farmers believe that the compensation standard can cover the rights and interests transferred due to homestead withdrawal, that is, acquiring a sense of equity in "the comparison of gains and losses," their withdrawal intention will be markedly improved.

H_2: A significantly positive correlation is observed between horizontal equity perception and withdrawal intention.

When farmers deem that the obtained compensation is not higher than that of others based on comparisons with the reference group (e.g., farmers in the same village or the same town), that is, gaining a sense of equity in the "horizontal comparison," their withdrawal intention will be evidently enhanced.

H_3: Vertical equity perception has a significantly positive correlation with withdrawal intention.

The withdrawal intention of farmers will be markedly strengthened when the compensation scheme satisfies the appeal for sharing the future appreciation of their homesteads, that is, gaining a sense of equity in the "vertical comparison."

2. Overview of the Study Area, Data Sources, and Sample Characteristics

2.1 Overview of the Study Area

Located in the central and eastern part of China, Henan Province has jurisdiction over 17 prefecture-level cities, 21 county-level cities, 82 counties, and 54 municipal districts, with a provincial area of 167,000 km^2. By the end of 2024, the province had a permanent population of 97.85 million, including 39.9 million rural residents, revealing an urbanization rate of 59.2%. The total area of urban and rural construction land in the province reached 2.45 million hectares, of which village land accounted for 1.765 million hectares (72.1%). This land is extensively used, possibly due to the large number of idle homesteads. In recent years, through five national-level homestead institutional reform pilots, such as those in Changyuan City, Henan Province has conducted valuable explorations in homestead withdrawal and revitalization, achieving a series of institutional and practical results. However, considering the massive base of homesteads and the accelerating flow of urban and rural population, idle and inefficient use of homesteads remains widespread. As an important grain-producing area and a typical traditional agricultural region in China, the problems Henan encounters in homestead withdrawal practices are of paradigmatic importance. Therefore, examining the decision-making behavior of farmers in this area not only helps determine the common characteristics of homestead withdrawal in traditional agricultural areas, but also provide policy-related references for similar areas.

2.2 Data Sources and Sample Characteristics

The data for this study were collected from the special investigation conducted by the research team in rural areas of Henan Province from January to March 2024. With the exception of Sanmenxia City, the investigation covered 16 cities in the province and involved random sampling of villages and farmers for the questionnaire survey. The questionnaire comprised four modules: (1) main features, including demographic variables and family economic status; (2) homestead endowment, including quantity, location, and architectural characteristics; (3) policy cognition, including ownership cognition and policy awareness; and (4) withdrawal intention, including compensation appeal and equity perception. After sorting out the survey results and eliminating the invalid questionnaires, a total of 1236 valid questionnaires were finally obtained. All variables were measured as categorical data; thus, their distribution characteristics were described using frequencies and percentages, as presented in *Table 1* below (the description was processed in written form based on the original questionnaire).

Table 1. Variable distribution characteristics (N = 1236)

Variable name	Option/classification	Frequencies	Percentages
Gender	Male	688	55.66
	Female	548	44.34
Age (years old)	<30	495	40.05
	30-60	640	51.78
	>60	101	8.17
Rural collective household or not	Yes	946	76.54
	No	290	23.46
Educational level	Primary school or below	173	14.0
	Middle school	540	43.69
	Junior college or above	523	42.31
Family population	1–2	91	7.36
	3–4	636	51.46
	≥5	539	41.18
Number of family members working outside	No	361	29.20
	1–2	680	55.02
	≥3	195	15.78
Annual per capita income of the family (yuan)	≤5000	470	38.03
	5001–15,000	393	31.80
	>15,000	373	30.17
Proportion of agricultural income in family income	<10%	535	43.28
	10%–50%	554	44.83
	>50%	147	11.89
Quantity of family homesteads (locations)	1	932	75.40
	2	227	18.37
	≥3	77	6.23
Nearest distance of the residence to the city (km)	<2	171	13.84
	2–10	433	35.03
	>10	632	51.13
House building structure	Reinforced concrete structure	354	28.64
	Brick–concrete or brick–wood structure	816	66.02
	Adobe house	66	5.34
Whether possessing any town house	Yes	498	40.29
	No	738	59.71
Awareness of homestead withdrawal policy	Very aware	150	12.14
	Somewhat aware	606	49.03
	Not aware	480	38.83
Cognition of homestead ownership	Individual ownership	583	47.17
	Collective ownership	411	33.25
	Others	242	19.58
Withdrawal intention	Yes	649	52.51
	No	587	47.49
Level of concern about the realization of reasonable consideration	High level of concern	369	29.85
	Ordinary level of concern	431	34.87
	No concern	436	35.28
Level of concern about the realization of horizontal equity	High level of concern	426	34.47
	Ordinary level of concern	413	33.41
	No concern	397	32.12
Level of concern about the realization of vertical equity	High level of concern	443	35.84
	Ordinary level of concern	406	32.85
	No concern	387	31.31

Source: authors' survey data

3. Variable Selection and Modeling

3.1 Variable Selection

Based on the survey data and with reference to existing studies (Wang, 2017; Cao *et al*., 2025), 17 explanatory variables were preliminarily selected. The definition of these variables and their statistical descriptions are displayed in *Table 2*.

Table 2. Variable definition and statistical description (N = 1236)

Variable type	Variable name	Variable code	Variable definition and value assignment	Mean	Variance
Dependent variable	Withdrawal intention	Y	0 = no, 1 = yes	0.53	0.25
Core independent variable	Level of concern about the realization of reasonable consideration	X_1	1 = high level of concern, 2 = ordinary level of concern, 3 = no concern	2.05	0.65
	Level of concern about the realization of horizontal equity	X_2	1 = high level of concern, 2 = ordinary level of concern, 3 = no concern	1.97	0.67
	Level of concern about the realization of vertical equity	X_3	1 = high level of concern, 2 = ordinary level of concern, 3 = no concern	1.95	0.67
Control independent variable	Gender	X_4	1 = male, 2 = female	1.44	0.25
	Age (years old)	X_5	1 = <30, 2 = 31–60, 3 = >60	1.68	0.38
	Rural collective household or not	X_6	No = 0, yes = 1	0.76	0.18
	Educational level	X_7	1 = ≤primary school, 2 = middle school, 3 = ≥junior college	2.28	0.48
	Family population	X_8	1 = 1–2 persons, 2 = 3–4 persons, 3 = >4 persons	2.34	0.37
	Number of family members working outside	X_9	1 = No, 2 = 1–2 persons, 3 = ≥3 persons	1.87	0.43
	Annual per capita income of the family (yuan)	X_{10}	1 = ≤5000, 2 = 5001–15,000, 3 = >15000	1.92	0.68
	Proportion of agricultural income in family income	X_{11}	1 = ≤10%, 2 = 10%–50%, 3 = >50%	1.67	0.45
	Quantity of family homesteads (locations)	X_{12}	1 = 1 location, 2 = 2 locations, 3 = 3 or more locations	1.31	0.34
	Nearest distance of the residence to the city (km)	X_{13}	1 = ≤2 km, 2 = 2–10 km, 3 = >10 km	2.37	0.51
	House building structure	X_{14}	1 = reinforced concrete structure, 2 = brick–concrete or brick–wood structure, 3 = adobe house	1.77	0.29
	Ownership of a town house	X_{15}	0 = no, 1 = yes	0.40	0.24
	Awareness of homestead withdrawal policy	X_{16}	1 = no aware, 2 = Somewhat aware, 3 = Very aware	1.73	0.44
	Cognition of homestead ownership	X_{17}	1 = individual ownership, 2 = collective ownership, 3 = others	1.72	0.59

Source: authors' processing and calculation of the survey data

Based on the above theoretical analysis and research hypotheses, the selected core variables are as follows: the level of concern about the realization of reasonable consideration (X_1), the level of concern about the realization of horizontal equity (X_2), and the level of concern about the realization of vertical equity (X_3). After preliminary screening using a linear probability model, all variables yielded a variance inflation factor (VIF) lower than 1.5 (substantially lower than the critical value, 5). The VIFs of X_1, X_2, and X_3 are 1.03, 1.11, and 1.12, respectively, indicating the absence of multicollinearity. By combining the preliminary screening results of the Chi-square test with theoretical correlation and statistical significance ($p < 0.1$), the variables finally retained in the model included three core variables and seven control variables, including type of registered residence, the proportion of agricultural income in total family income, and building structure. All selected variables were recoded. Although house building structure (X_{14}) did not reach the conventional significance level ($p = 0.138$), it was still retained in the model because

it aligns with the following theoretical expectation: building value accounts for a relatively large proportion of the rights and benefit losses arising from homestead withdrawal; construction costs notably vary across different building structures; and the survey results reveal that most farmers pay increased attention to housing compensation. The screening results of the concrete variables are presented in *Table 3* below.

Table 3. Variable screening basis and results (N = 1236)

Variable type	Original variable code	New variable code	VIF	P value	Reserved/ eliminated	Theoretical basis
Core variable	X_1	X_1	1.03	<0.001	Reserved	Adam's Equity Theory
	X_2	X_2	1.11	<0.001	Reserved	Adam's Equity Theory
	X_3	X_3	1.12	<0.001	Reserved	Adam's Equity Theory
Control variable	X_5	X_4	1.43	0.002	Reserved	Life cycle effect
	X_6	X_5	1.09	0.002	Reserved	Institutional constraint effect
	X_{11}	X_6	1.11	0.049	Reserved	Livelihood dependency
	X_{13}	X_7	1.21	0.003	Reserved	Location Theory
	X_{15}	X_8	1.17	0.026	Reserved	Alternative housing guarantee
	X_{16}	X_9	1.07	<0.001	Reserved	Policy cognition effect
	X_{14}	X_{10}	1.15	0.138	Reserved	Asset heterogeneity[+]
Eliminated variable	X_4, X_7–X_{10}, X_{12}, X_{17}		1.05–1.43	0.112–0.911	Eliminated	Statistical insignificance

Test criteria: the critical value of VIF is 5, and the significance threshold is 0.1; [+] retained for theoretical relevance.

Source: authors' calculation

3.2 Modeling

Considering the selection of the econometric model, the dependent variable, "withdrawal intention," is a binary discrete variable (1 = willing, 0 = unwilling). Therefore, the analysis was performed using a binary Logit model, which was estimated through the maximum likelihood estimation method, as follows:

$$\ln\left(\frac{P(Y=1)}{1-P(Y=1)}\right)=\beta_0+\beta_1X_1+\beta_2X_2+\beta_3X_3+\sum_{i=4}^{10}\beta_iX_i+\in \quad (1)$$

where ln denotes the natural logarithm, P (Y = 1) represents the probability that a farmer is willing to withdraw from the homestead, β_0 is the intercept tern, β_1–β_{10} are the regression coefficients of each variable, and ϵ is the random error term. The economic importance of the main parameters is explained in *Table 4*.

Table 4. Explanation of economic importance of main parameters

Parameter	Expected direction	Economic explanation
β_1	+	The improved reasonable consideration perception (X_1) significantly enhances withdrawal intention. If $\beta_1 > 0$, then H_1 holds true.
β_2	+	The improved horizontal equity perception (X_2) markedly enhances withdrawal intention. If $\beta_1 > 0$, then H_2 holds true.
β_3	+	The improved vertical equity perception (X_3) significantly enhances withdrawal intention. If $\beta_3 > 0$, then H_3 holds true.
β_4-β_{10}	-/+	The influencing direction of the coefficient of control variables varies from variable to variable.

Source: created by the authors.

Aiming to comprehensively evaluate the influence of variables, in addition to reporting the regression coefficient and Odds Ratio (OR), the average marginal effects (AMEs) of each variable was also further calculated to intuitively reflect the marginal contribution of independent variables to the withdrawal probability. All regressions employed heteroskedasticity-robust standard errors (Huber–White) to control potential heteroscedasticity. The Wald test, McFadden pseudo-R^2, and the Probit model were employed to measure the overall significance of the model, the goodness of fit, the robustness of the conclusion, respectively.

4. Model Running and Result Analysis

4.1 Model Results

The binary Logit model was estimated using Stata software. The results indicate that farmers' withdrawal intentions are significantly influenced by the level of concern for the realization of reasonable consideration (X_1), horizontal equity (X_2), and vertical equity (X_3); as well as by age (X_4), rural collective household status (X_5), the proportion of agricultural income in total family income (X_6), the nearest distance of the residence to the city (X_7), ownership of a town house (X_8), and understanding of homestead withdrawal policy (X_9). The Wald test indicates that the model is significant overall ($\chi^2(10) = 127.20$, $p < 0.001$), and the McFadden pseudo-R^2 is 0.090, which falls within the reasonable range (0.05–0.25) of binary classification models, indicating good explanatory power. The specific parameters are detailed in *Table 5*.

Table 5. Model estimation results (N = 1236)

Variable type and name	Coefficient (β)	Odds ratio (OR)	Marginal effect (AME)	95% confidence interval (CI)
Core variable				
Level of concern about the realization of reasonable consideration (X_1)	0.317***	1.373***	0.070***	1.179–1.599
Level of concern about the realization of horizontal equity (X_2)	0.359***	1.432***	0.079***	1.223–1.676
Level of concern about the realization of vertical equity (X_3)	0.355***	1.426***	0.078***	1.218–1.671
Control variable				
Age (X_4)	−0.433***	0.649***	−0.095***	0.531–0.793
Rural collective household or not (X_5)	0.502***	1.652***	0.110***	1.237–2.207
Proportion of agricultural income in family income (X_6)	−0.192**	0.826**	−0.042**	0.688–0.991
Nearest distance of the residence to the city (X_7)	−0.272***	0.762***	−0.060***	0.637–0.911
Ownership of a town house (X_8)	0.320**	1.377**	0.070**	1.063–1.784
Awareness of homestead withdrawal policy (X_9)	0.468***	1.597***	0.103***	1.327–1.923
House building structure (X_{10})	−0.195	0.823	−0.043	0.650–1.041
Model test				
Wald$\chi^2(10) = 127.20$***				
Pseudo-R^2 (McFadden) = 0.090				

Notes: *, **, and *** represent the significance levels of 0.1, 0.05, and 0.01, respectively; heteroskedasticity is controlled using Huber–White robust standard errors in the regression; marginal effect (AME) is calculated via margins, dydx(*), reflecting the change in the probability of withdrawal for a one-unit increase in the independent variable; OR is solved through exp(β), reflecting the multiplicative change in the odds of withdrawal for a one-unit increase in the independent variable. The 95% confidence interval of OR is calculated using the Delta method, embodying the statistical uncertainty of an estimated value.

Source: authors' calculation.

4.2 Analysis of Results

A. Analysis of core variables

The empirical results based on the binary Logit model show that all three dimensions of equity perception have a significantly positive impact on the homestead withdrawal intention of farmers ($p < 0.01$). H_1, H_2, and H_3 were all verified; that is, the sense of equity gained by farmers in the three dimensions, including reasonable consideration, horizontal comparison, and vertical comparison, can effectively encourage them to withdraw from idle homesteads, specifically as follows:

Horizontal equity perception (X_2) exerts the strongest effect, with an odds ratio (OR = 1.432) indicating that a 1 order of magnitude increase in farmers' assessment of the horizontal equity of the compensation standard simultaneously raises the OR of their withdrawal intention by 43.2%. Similarly, the AME (0.079) reveals that their withdrawal probability will increase by 7.9% accordingly. These findings indicate the operational mechanism of horizontal equity perception: the withdrawal intention of farmers will be substantially enhanced when their perceived compensation is equal to or higher than of other comparison objects. Conversely, if they perceive their compensation to be lower, then they are likely to feel a "sense of relative deprivation" and potentially refuse withdrawal from homesteads. The effect of horizontal equity perception highlights the psychological motivation of farmers to avoid potential losses through social comparisons.

The effect (OR = 1.426, AME = 0.078) of vertical equity perception (X_3) is highly similar to that of horizontal equity, reflecting that farmers are equally sensitive to equity over time. Farmers are concern that withdrawing from their land may contribute to their exclusion from future land value appreciation, losing the opportunity to share the benefits of social and economic development. Establishing a compensation mechanism that coincides with the long-term benefit expectations of farmers can help ensure their future revenue while safeguarding their immediate property rights and interests, thereby prompting them to proceed with the withdrawal decision.

Reasonable consideration perception (X_1) presents a relatively weaker effect than the other two factors (OR = 1.373, AME = 0.070), but it is the fundamental threshold for realizing incentives. Farmers will avoid homestead withdrawal if the compensation fails to cover their rights and benefit losses arising from such withdrawal; if such losses can be covered, then considerations of "relative equity" (horizontal and vertical) will be further presented. Hence, reasonable consideration is regarded as a necessary condition rather than a sufficient one.

B. Analysis of control variables

Based on the relationship between the control variables and withdrawal intention, the control variables can be divided into positively and negatively correlated factors. The former includes rural registered permanent residence (X_5), ownership of a town house (X_8), and policy understanding (X_9). The assumption of property right integrity is supported by the significantly positive effect (AME = 0.110, $p < 0.01$) of rural registered permanent residence (X_5). The rural registered permanent residence pertains to the possession of the relatively integrated homestead right (qualification right and right of use). Farmers that own the rural registered permanent residence have relatively strong bargaining power and high confidence in acquiring high compensations, thereby succeeding in assets realization through homestead withdrawal. Conversely, farmers without rural registered permanent residence, in addition to the absence of this advantage, may also be insensitive to the compensation income due to the relatively high non-agricultural income, thus lacking the impetus of homestead withdrawal. The strong promoting effect of policy understanding (AME

= 0.103, p<0.01) indicates that information asymmetry is a key factor restricting homestead withdrawal. From the national macro-policy to the local implementation scheme, considerable attention has been paid to farmers' benefits in homestead withdrawal ("undamaged benefits of farmers" is one of the three redlines in the rural land reform). Therefore, strengthening their policy cognition through transparency improvement can minimize the uncertain expectations of farmers and enhance their initiative in homestead withdrawal. The positive effect of owning a town house (AME = 0.070, p<0.05) reveals that concerns about housing assurance can be substantially relieved for these farmers, increasing their willingness to realize the property value of their homesteads through withdrawal.

Negatively correlated factors include the age (X_4), the proportion of agricultural income in family income (X_6), and the nearest distance of the residence to the city (X_7). The negative effect of age (AME = −0.095, p 0 <0.01) aligns with life cycle theory. The withdrawal intention of aged farmers are significantly weakened due to the decline in human capital, reduced employment competitiveness, and strong countryside complex. The inhibitory effect of the distance from the residence to the city (AME = −0.060, p < 0.01) reflects the influence of location on homestead value. Suburb homesteads, which have the high asset values, raise farmers' compensation expectations and thereby strengthen their withdrawal intention. Conversely, for relatively remote homesteads, farmers' withdrawal motivation is weakened due to the substantial decline in asset value. The effect of livelihood dependency is revealed by the negative correlation with the proportion of agricultural income (X_6) (AME = −0.042, p < 0.05), indicating that farmers who highly depend on agricultural income are more concerned about the risks of livelihood transformation after homestead withdrawal.

C. Robustness test

Aiming to test the robustness of conclusions, the estimation was made using the Probit and the Logit models, which are based on logistic distribution and standard normal distribution assumptions, respectively. The estimation results are compared in *Table 6* below.

Table 6. Comparison between Logit and Probit model results (N = 1236)

Variable type and name	AME of Logit model	AME of Probit model
Core variable		
Level of concern about the realization of reasonable consideration (X_1)	0.070***(0.017)	0.068***(0.017)
Level of concern about the realization of horizontal equity (X_2)	0.079***(0.017)	0.078***(0.017)
Level of concern about the realization of vertical equity (X_3)	0.078***(0.017)	0.077***(0.017)
Control variable		
Age (X_4)	−0.095***(0.022)	−0.095***(0.022)
Rural collective household or not (X_5)	0.110***(0.032)	0.110***(0.032)
Proportion of agricultural income in family income (X_6)	−0.042**(0.020)	−0.044**(0.020)
Nearest distance of the residence to the city (X_7)	−0.060***(0.020)	−0.061***(0.020)
Ownership of a town house (X_8)	0.070**(0.029)	0.070**(0.029)
Understanding of homestead withdrawal policy (X_9)	0.103***(0.020)	0.102***(0.020)
House building structure (X_{10})	−0.043(0.026)	−0.042(0.026)
Model test		
Pseudo-R^2	0.090	0.089
Wald/LR χ^2	127.20***	137.82***

Notes: *, **, and *** represent the significance levels of 0.1, 0.05, and 0.01, respectively; in the brackets are robust standard errors; the AMEs of the Logit and Probit models are calculated through margins, dydx(*) under the robust standard error model; the Wald test statistics correspond to the results under vce(robust).

Source: authors' calculation.

As presented in *Table 6*, for all variables, the difference in AMEs between the Probit and Logit models is less than 3%. The core variables are completely similar in direction, magnitude of the effect, and relative importance ranking (horizontal equity > vertical equity > reasonable consideration), indicating that the selection of the link function does not affect the conclusion, thereby yielding a robust model.

5. Discussions

Using 1236 micro-survey data in rural areas of Henan Province, Adam's Equity Theory was introduced to establish a three-dimensional (reasonable consideration, horizontal equity, and vertical equity) analytical framework, aiming to examine the influencing mechanism of equity perception on the homestead withdrawal intention of farmers. The results not only verify theoretical hypotheses, but also reveal the complex micro-psychological process in their withdrawal decision-making. Thus, this study provides a novel perspective for understanding the behavioral logic of farmers in China's rural land reform and offers a theoretical foundation and policy entry point to address the difficulties (that is, structural mismatching of land resources) encountered due to idle homesteads.

First, the core findings form an empirical confirmation of Equity Theory, revealing the "multi-dimensional equity preferences" of farmers in homestead withdrawal decision-making. Research hypotheses H_1–H_3 are all supported ($p < 0.01$), confirming that equity perception is a key factor driving farmers' homestead withdrawal decision. This finding extends the academic focus on compensation from the previous "absolute quantity" calculation, which emphasizes economic value, to farmers' subjective "relative value" judgments, enhancing our understanding of the complexity of their decision-making. The marginal effect estimation results show that all three dimensions of equity perception are generally significant, but some differences are still noted. The effects of horizontal and vertical equity (AME = 0.079/0.078) are slightly higher than that of reasonable consideration (AME = 0.070), indicating that farmers are not purely "rational economic agents." They are not only looking forward to realizing reasonable consideration (that is, ensuring that compensation can cover the loss of rights and interests), but also pay additional attention to equity perceptions from "horizontal comparison" and "vertical comparison." This finding reveals the complex decision-making psychology of farmers, which considers "absolute equity and relative equity," providing micro-level evidence for the traditional Chinese concept—inequality, rather than want, is the cause of trouble—within the context of contemporary rural land reform. This concept also resonates with Adam's Equity Theory. Therefore, the results indicate that the optimal allocation of homestead resources depends not only on the realization of their objective economic value but is also strongly restricted by farmers' subjective judgments about the "equity of compensation."

Second, the conclusions of this study contribute to, and extend, the existing literature, creating a meaningful dialogue with previous research. Although the importance of compensation has been generally recognized in previous studies, it is still considered a general economic concept. In this study, the influencing effect of three-dimensional equity perception on withdrawal intention was empirically tested. Thus, the "equity" expected by farmers was transformed from a fuzzy concept into a measurable, explainable, and clear interest, which internally coincides with the judgment made by Sun P F et al. (2022); that is, rational compensation is a critical incentive for realizing homestead withdrawal. However, this study further indicated that the connotation of "irrationality" should include three dimensions of farmers' equity perception, making up for the minimal attention on farmers' psychological mechanism in withdrawal compensation. The finding that farmers are highly sensitive to relative equity is consistent with the conclusions of Lv J S et al. (2019) regarding farmers' compensation intentions. In this study, the effect of different dimensions of equity perception was further revealed through a quantitative analysis. The analysis results emphasize the importance of establishing a compensation mechanism that focuses on

"consideration equity" and "relative equity," which is the core direction when optimizing the compensation policy for homestead withdrawal.

Third, the analysis results of control variables provide corroborating evidence from a different perspective. Farmers possessing rural household registration and understanding of relevant policies are willing to withdraw from their homestead, revealing a strong marginal effect (AME is 0.110 and 0.103, respectively). This finding proves that a clear definition of resource property rights and a transparent information environment constitute the foundation for reducing transaction costs and promoting resource transactions. Withdrawal intention exhibits significantly negative correlations with farmers' age, dependence on agricultural income, and distance of the residence to the city. Among which, the relatively strong negative effects of age (AME = −0.095) and dependence on agricultural income (AME = −0.042) reflect the realistic constraint of farmers' livelihood transformation and the heterogeneous influence of location attributes of land resources. Overall, these findings are highly consistent with mainstream research, which indirectly strengthens the robustness of the model setting and core findings presented in this study, while further revealing the acting point of reform policy implementation.

Although the influence of rural house building structure did not reach statistical significance, the directional results remain informative. The regression result (β = −0.195) for building structure (X_{10}) indicates that farmers living in reinforced concrete houses show stronger withdrawal intention compared with those living in lower-value adobe houses. This finding conforms to the economic rationality assumption: higher asset value tends to motivate stronger realization intention. A reasonable explanation is that farmers living higher-quality houses are more inclined to recycle sunk costs by withdrawing from idle homesteads and houses. However, this effect is not statistically significant (p = 0.106), thereby warranting further investigation. The small number of adobe houses (only 66 cases, accounting for 5.3%) in the sample and their concentration in remote areas may have limited the observed effect, potentially overshadowed by other negative factors such as homestead location. Future research should further examine the influence of rural house quality through directional sample expansion and hierarchical regression analysis.

Conclusions and policy suggestions

A. Main conclusions

Based on the previous empirical analysis, the following core conclusions are drawn:

(1) Equity perception, which is multidimensional, is the key psychological mechanism encouraging farmers to withdraw from homesteads. Farmers' withdrawal intentions are significantly influenced by three dimensions: reasonable consideration, horizontal equity, and vertical equity. Farmers not only expect compensation to cover the losses of their immediate rights and interests but also pay additional attention to the "relative equity" of the compensation scheme; that is, assessing equity through comparison with a reference group (horizontal equity) and considering potential future income (vertical equity). This finding indicates that the withdrawal decision-making of farmers is a complex process that combines economic rationality and social comparison. This process also confirms the profound influence of the traditional Chinese concept—inequality, rather than want, is the cause of trouble—on people's behavioral choice.

(2) Individual and family characteristics have a key regulatory effect on farmers' withdrawal intention, which can be effectively enhanced by clarifying homestead ownership, strengthening policy propaganda, and ensuring housing security. However, their withdrawal intention will be inhibited by their growing age,

the dependence of family livelihood on agricultural income, and the remote location of homesteads. Therefore, the various needs of different groups should be considered during policy implementation.

B. Policy suggestions

Promoting the withdrawal and revitalization of idle homesteads, which activates the "sleeping" homestead assets, is key to achieving the optimal allocation of rural factors and resources and serves as an important driver of urban–rural integrated development. Given that the effects of control variables such as household registration, age, and family income structure are well established in the literature, this study focuses on farmers' three-dimensional equity perceptions in withdrawal compensation. Based on the empirical research findings, the following policy recommendations are proposed:

(1) The compensation price should be scientifically measured by introducing third-party professional appraisal agencies, realizing farmers' sense of equity in "input–outcome ratio." In practice, the compensation standard for homestead withdrawal is generally determined based on the following: the compensation standard for rural land expropriation, the average market transaction price of collectively owned construction land of business use, and negotiation between collective economic organizations and farmers to withdraw from homesteads. Using the compensation standard to cover for the loss of farmers' rights and interests is challenging due to the detachment of the reference standard from the right and interest values of homestead holders or the information asymmetry. Aiming to realize "reasonable consideration," the connotation of compensation should be classified and defined using the specific circumstances of homestead withdrawal, and the compensation price should be assessed accordingly. However, these strategies require technical support from professional appraisal agencies. Survey data shows that 52.1% of the farmers hold positive attitude toward the participation of professional appraisal agencies in compensation pricing, indicating social acceptance of a market-driven appraisal mechanism. In addition to technical support from professional appraisal agencies, a three-stage (evaluation, publicity, and reconsideration) pricing mechanism should also be established to ensure the participation of farmers in the pricing process.

(2) Aiming to realize farmers' sense of equity in "horizontal comparison," a regionally unified compensation standard should be established based on the homestead grading result. Farmers expect "horizontal equity" in homestead withdrawal compensation, that is, the compensation they gain is not lower than that of others within a comparable range. The research findings show that the comparative ranges—same village, same town, and same county (city)—derived from the interviewed farmers, account for 32.6%, 27.4%, and 30.1%, respectively. Based on these data, the demand for horizontal equity among 90.1% of farmers can be satisfied by implementing a unified compensation standard at county (or city) level. However, this approach is impractical due to the excessively high administrative cost, its limited capability to reflect differential land earnings, and its contradiction with location value theory. Therefore, one recommendation involves determining a unified compensation standard using rural homestead grading results (i.e., based on the homestead grade, which is generally highly consistent with the administrative boundary of villages and towns), while referencing measured compensation prices. Similar strategies have been implemented in pilot counties, such as Zhicheng City, Hubei Province. This approach not only realizes "horizontal equity" within a certain range, satisfying most farmers' requirements for "sense of equity," while also reflecting differential land earnings. Notably, the regionally unified compensation standard only corresponds to land compensation and does not include aboveground buildings. The latter reflects farmers' capital and labor inputs in homesteads, revealing varying values. Distinguishing them is crucial to ensure equity. The withdrawal compensation for specific homesteads should include the sum of regionally unified land compensation and differentiated building compensation.

(3) Compensation methods should be innovated to account for farmers' expected asset appreciation, thereby addressing their sense of equity in "vertical comparison." Under the preset compensation standard, such innovations provide an effective way to address farmers' concerns about asset appreciation. For instance, a payment-by-installments model conforming to farmers' "expectation of rise in price" should be established, offering a competitive rate of return. Therefore, farmers can acquire high returns on assets their while gaining compensations in installments. Additionally, mechanisms should be established to convert homestead withdrawal compensation into collective asset stocks using the rural collective property rights reform. This approach could be realized by referencing the quantitative stock conversion method in the "three-transformation reform" (transformation of resources into assets, assets into stocks, and farmers into shareholders). Therefore, farmers can continue to share the dividends of collective economic development through equity appreciation and dividends. Backed by government credit, the compensation can be converted into medium- and long-term local debt (the bond interest rate should also be competitive), providing farmers with a sense of asset security while simultaneously allowing them to realize returns through bond interest. Through the application of innovative financial instruments, the value chain of compensation can be extended (in temporal dimension) using three methods: installment payments, stock-based compensation, and bond-based compensation. This approach not only satisfies farmers' reasonable expectations for asset appreciation but also provides flexible compensation payment schemes for collective economic organizations. Notably, various financial compensation instruments should be designed based on three basic principles—predictable returns, controllable risks, and sufficient liquidity. Furthermore, a complete information disclosure and investor protection mechanism should be established.

(4) A systematic reform support system should be established. The homestead withdrawal reform is a crucial component of the comprehensively deepening reforms in China; thus, it should be incorporated into the overall reform pattern to create a multidimensional policy support system, accelerating the withdrawal and revitalization of idle rural homesteads. First, policy supply should be strengthened. For example, the introduction of the *Regulations on Rural Homestead Withdrawal Compensation* enables the explicit stipulation of the conditions and procedures of homestead withdrawal, the connotations and basis of compensation standards, and the authority–responsibility relationships of involved parties. Additionally, guidelines for special bond issuance for homestead withdrawal should be introduced in accordance with the *Administrative Measures for Local Government Bond Issuance*. Second, fundraising channels should be extended. For example, the establishment of the "special bond + compensation fund" dual model and provincial homestead withdrawal compensation funds can help attract private capital while releasing the special bonds dedicate to homestead withdrawal. Third, technical support should be strengthened. For example, the *Regulations on Rural Collective Land Appraisal* can provide technical support and national standards for appraising various types of collective land, including homesteads. Fourth, reform collaboration should be promoted. This strategy involves the following: collaborating with the rural collective property rights reform to create the rules for transforming compensation into collective asset stocks; collaborating with urban–rural unified construction land markets to incorporate withdrawn homesteads into the indicator management of "Linkage Between Urban Construction Land Increase and Rural Construction Land Decrease"; collaborating with urban–rural integrated development to establish a mechanism for equivalent conversion of homestead property value into urban housing security and social security benefits. Finally, the construction of a systematic support system can provide a solid institutional guarantee for revitalizing idle homestead resources and ensuring their efficient allocation.

C. Research limitations and future directions

First, at the data and sample level, this study is based on cross-sectional data from a provincial questionnaire survey. Although the research conclusions are representative of similar regions, their generalizability still needs further verification. Future research could include comparative studies across different regions. Moreover, panel data could be established through multi-period tracking to capture the dynamic evolution of farmers' decision-making. Second, at the research depth level, equity measurement mainly relied on farmers' subjective reports. Future research efforts could aim to accurately reflect their psychological mechanisms by combining objective indicators or conducting scenario experiments. Finally, at the level of influencing mechanisms, while the direct effect of equity perception was verified, the potential complex mediating or moderating effects of factors such as policy trust and village community relationships remain topics for further discussion in future research.

Literature

Adams, J. S. (1963), "Toward an understanding of inequity", *Journal of Abnormal Psychology*, Vol. 67, No. 5, pp. 422-436.

Adams, J. S. (1965), "Inequity in social exchange", *Advances in Experimental Social Psychology*, No. 2, pp. 267-299.

Blaylock, B. K. (1985), "Risk perception: Evidence of an interactive process", *Journal of Business Research*, Vol. 13, No. 3, pp. 207-221.

Cao, C., Ma, L. B., Wu, S. S., Yao, L. T. (2025), "Influencing factors and classification governance of farmers' willingness to withdraw from rural homesteads: Based on the perspectives of risk perception and comprehensive satisfaction", *Journal of Natural Resources*, Vol. 40, No. 10, pp. 2808-2827.

Daniel, K., Amos, T. (1979), "Prospect theory: An analysis of decision under risk", *Econometrica*, Vol. 47, No. 2, pp. 263-291.

Didla, S., Mearns, K., Flin, R. (2009), "Safety citizenship behaviour: A proactive approach to risk management", *Journal of Risk Research*, Vol. 12, No. 3, pp. 475-483.

Gao, Y., Gao, C. X., Zhao, K. (2023), "Does land titling program inhibit farmers' willingness to withdraw from rural residential land: Based on a micro investigation from Sichuan, Henan and Anhui Provinces", *China Land Science*, Vol. 37, No. 8, pp. 42-51.

Gong, H. L. (2017), "The function of homestead and its influence on farmers' willingness to withdraw from the homestead: Based on the empirical study of the different ownership of residential land", *Issues in Agricultural Economy*, No. 11, pp. 89-99, 112.

Grönroos, C. (1997) "Value-driven relational marketing: From products to resources and competencies", *Journal of Marketing Management*, Vol. 13, No. 5, pp. 407-409.

Han, W. L., Liu. L. (2020), "Ownership consciousness, resource endowment and homestead withdrawal intention", *Issues in Agricultural Economy*, No. 3, pp. 31-39.

He, S. Y., Huang, S. L., Liu, Z. J. (2023), "The impact of citizenization of rural migrant labors on their homestead exit willingness: Based on the mediation effect of homestead dependence", *Resources Science*, Vol. 45, No. 10, pp. 2009-2025.

Jin, H. T., Liu, Q. N., Shi, Q. H. (2023), "Research on risk perception, risk attitude, and rural households' withdrawal willingness of homestead: A case study of suburban farmers in Tangshan City, Hebei Province", *Research of Agricultural Modernization*, Vol. 44, No. 1, pp. 65-76.

Kahneman, D., Tversky, A. (1979), "Prospect theory: An analysis of decision under risk", *Econometrica*, Vol. 47, No. 2, pp. 263-292.

Lee, E. S. (1966), "A theory of migration", *Demography*, No. 3, pp. 47-57.

Liang, F. C., Lin, C. Y. (2021), "Operation mechanism, mode comparison and path optimization of rural homestead withdrawal with compensation in economically developed area", *China Rural Survey*, No. 3, pp. 34-47.

Liu, G. D., Hao, K. T., Wu W. (2023), "Analysis on the influence of homestead withdrawal intention from the intergenerational perspective: An empirical study based on 1177 questionnaires in Guanzhong area of Shanxi Province", *Journal of Northwest University (Philosophy and Social Sciences Edition)*, Vol. 53, No. 1, pp. 72-82.

Luo, B. T., Wang, Z. B. (2024), "Income quality and farmers' willingness to withdraw residential land: A U-shaped relationship: Evidence from the survey data of Ningxia Hui Autonomous Region", *Chinese Journal of Agricultural Resources and Regional Planning*, Vol. 45, No. 2, pp. 232-240.

Lv, S. J., Weng X. Y. (2019), "Investigation on the willingness to compensate for the withdrawal of farmers' homestead and policy recommendations", *Journal of Northwest A&F University (Social Science Edition)*, Vol. 19, No. 1, pp. 51-59.

Qu, Y. B., Chai, Y. F., Zhu, W. Y., Ping, Z. L., Zong, H. N., Wang, S. (2021), "Archetype analysis of rural homestead withdrawal patterns based on the framework of diagnosis-design-outcome", *Resources Science*, Vol. 43, No. 7, pp. 1293-1306.

Schuman, H., Rodgers, W. L. (2004), "Cohorts,chronology,and collective memories", *Public Opinion Quarterly*, Vol. 68, No. 2, pp. 217-254.

Simon, H. A. (2001), "On simulating Simon: His monomania, and its sources in bounded rationality, and its sources in bounded rationality", *Studies in the History and Philosophy of Science*, Vol. 32, No. 3, pp. 501-505.

Sun, P. F., Zheng, J., Zhao, K., Zhou, S. Q. (2022), "Effect of farmers' differentiation on evaluation of rural homestead withdrawal policy: A Case Study of Jinzhai County, Anhui Province", *Journal of Arid Land Resources and Environment*, Vol. 36, No. 3, pp. 73-78.

Thaler, R. (1980), "Toward a positive theory of consumer choice", *Journal of Economic Behavior & Organization*, Vol. 1, No. 1, pp. 39-60.

Vacca, R., Bianchi, F. (2024), "Diversity, integration, and variability of intergenerational relationships in old age: New insights from personal network research", *Social Science Research*, Vol. 19, No. 12, pp. 102-117.

Wang, Z. L., Lin, C. X., Xie, J. (2017), "Analysis of peasants, heterogeneity impact on factors of homestead exit willingness: based on investigation of 864 households in Chongqing City", *Agricultural Economics and Management*, No. 5, pp. 63-70.

Wu, Y., Dong, X. R., Wang, Q. B., Liu, H. B., Yang, J. Z., Cui, A. L. (2011), "Establishment of the assessment system on the living level of land-lost farmers", *China Land Science*, Vol. 25, No. 5, pp. 23-28.

Wu, Y. L., Yu, Y. Y., Hong, J. G. (2022), "Property rights transfer,value realization and revenue sharing of rural residential land withdrawal: An analysis based on field surveys in Jinzhai and Yujiang", *Chinese Rural Economy*, No. 4, pp. 42-63.

Xia, M., Lin, S. M., Guo, G. C. (2016), "Influential factors of farmers' willingness in rural residential land quittance in different economic developed areas in Jiangsu Province", *Resources Science*, Vol. 38, No. 4, pp. 728-737.

Yan, Z. Q., Li, J. Q., Zeng, W. J. (2017), "Analysis of homestead withdrawal intention and its policy implications: A case study of Shuangliu District, Chengdu City", *Rural Economy*, No. 6, pp. 28-34.

Yuan, S. F., Gan, X. Y., Tang, Y. Y. (2021), "Increment income sharing of rural homestead withdrawal based on alliance interest distribution: A case of typical counties and cities in Zhejiang Province", *Resources Science*, Vol. 43, No. 7, pp. 1361-1374.

Zeithaml, V. A. (1988), "Consumer perceptions of price, quality and value: A means-end model and synthesis of evidence", *Journal of Marketing*, Vol. 52, No. 3, pp. 2-22.

Zeng, X. H., Guo, X. M. (2019), "The path of 'Separation of Three Rights' on rural homestead in traditional rural areas: On the homestead system reform in Yujiang District and Luxian County", *Issues in Agricultural Economy*, No. 6, pp. 58-66.

Zhang, H. L., Xia, X. L. (2021), "Impact of risk perception and institutional trust on farmer' behavior of quitting rural residential land", *Journal of Northwest A&F University (Social Science Edition)*, Vol. 21, No. 1, pp. 145-154.

Zhang, Y., Bao, T. T. (2017), "Analysis of the driving forces of rural homestead exit: From the perspective of the push-pull theory", *Rural Economy*, No. 4, pp. 18-23.

Zhang, Y. C., Xiong, W. Y. (2025), "Labor migration types, function claims and household willingness of homestead transfer: Sample evidence from the agricultural transfer population", *Geographical Research*, Vol. 44, No. 3, pp. 731-749.

Zheng, X. M. (2025), "Evolutionary logic, practical approaches and trend prospects of China's rural homestead system", *Economic Geography*, Vol. 45, No. 2, pp. 163-172.

Zhou, Y. J., Lin, A. W., Zhang, E. S. (2021), "Rural homestead value reconstruction and withdrawal compensation pricing based on marginal opportunity cost", *Resources Science*, Vol. 43, No. 7, pp. 1428-1439.

Acknowledgements.

This study was supported by the Henan Province Philosophy and Social Science Planning Project (No. 2023BJJ023) & the Ministry of Education of China Humanities and Social Sciences Research Project (No. 23YJAZH230).

TEISINGUMO SUVOKIMO ĮTAKA ŪKININKŲ KETINIMUI ATSISAKYTI SODYBŲ: EMPIRINIS TYRIMAS KINIJOS KAIMO VIETOVĖSE

Xiaogang Zhu, Xuan Zhang

Santrauka. Skatinimas atsisakyti nenaudojamų sodybų yra svarbi priemonė siekiant efektyvesnio žemės išteklių paskirstymo ir kaimo atgaivinimo. Svarbiausi šiame procese yra ūkininkų ketinimai, tačiau trūksta empirinių tyrimų, nagrinėjančių kompensavimo standartus ir teisingumo suvokimo mechanizmus. Remiantis Adamso teisingumo teorija, šiame tyrime sukurta trimatė analizės sistema (pagrįstumo, horizontaliojo ir vertikaliojo teisingumo dimensijos). Empirinė analizė atlikta taikant dvejetainį Logit modelį, pasitelkus1236 ūkininkų apklausos duomenis iš Henano provincijos kaimo vietovių. Tyrimo rezultatai rodo, kad teisingumo suvokimas visose trijose dimensijose teigiamai veikia ūkininkų ketinimą atsisakyti sodybų. Nustatyta, kad ūkininkams svarbesnis yra santykinis, o ne absoliutus kompensacijos teisingumas. Be to, ketinimą reikšmingai didina kaimo registracija, politikos išmanymas ir miesto būsto turėjimas, mažina amžius, priklausomybė nuo žemės ūkio pajamų ir nuotolis iki sodybos. Remiantis rezultatais siūloma diegti nepriklausomą vertinimą, taikyti diferencijuotus kompensavimo standartus ir plėtoti kompensavimo formas. Tyrimas prisideda prie kompensavimo politikos tobulinimo ir kaimo žemės sistemos reformų.

Reikšminiai žodžiai: sodyba (namų valda); teisingumo suvokimas; teisingumo teorija; pasitraukimo ketinimas; Logit modelis.