

Article

A Study on the Professionalization of Young Part-Time Farmers Based on Two-Way Push–Pull Model

Lulu Yang ¹, Yankai Gai ¹ and An Zhang ^{2,*} 

¹ Research Center for Land Policy, School of Law and Humanities, China University of Mining and Technology-Beijing, Beijing 100083, China; 201323@cumtb.edu.cn (L.Y.)

² State Key Laboratory of Resources and Environmental Information System, Institute of Geographical Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing 100101, China

* Correspondence: zhangnan@igsrr.ac.cn

Abstract: A growing number of young Chinese farmers are abandoning agriculture. This research aimed to identify ways to stimulate enthusiasm among young people for choosing careers in agriculture and to promote the professionalization of young part-time farmers. This study surveyed 310 young part-time farmers in Chongqing City and Tianjin City. We constructed the Two-Way Push–Pull (TWPP) model to assess the willingness of young part-time farmers to work professionally in agriculture. The results show that agricultural policy support, hometown attachment, agricultural income, and agricultural industrialization significantly influence young part-time farmers' willingness to pursue professional farming careers. However, risks of farming, children's education, urban housing, and non-farm income negatively impact their willingness. The government must strengthen policy support's influence on their willingness to motivate young part-time farmers to become professional farmers. This could include reducing farming risks, advancing agricultural industrialization, improving farmers' professional status and reputation, and increasing the quality of rural public services.

Keywords: young part-time farmers; professionalization; TWPP model; influencing factors



Citation: Yang, L.; Gai, Y.; Zhang, A. A Study on the Professionalization of Young Part-Time Farmers Based on Two-Way Push–Pull Model. *Sustainability* **2023**, *15*, 13791. <https://doi.org/10.3390/su151813791>

Received: 17 July 2023

Revised: 11 September 2023

Accepted: 12 September 2023

Published: 15 September 2023



Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

Nowadays, a growing number of young Chinese farmers are abandoning agriculture. Who will plant the land in the future and how will the land be planted well have become thorny problems in China's agriculture. The total number of China's migrant workers in 2019 reached 290.77 million. Young farmers aged 40 and below were the primary migrant workers, accounting for 67.8% [1]. Part of the young migrant workers go back and forth between urban and rural areas periodically. Most of them are under the age of 45 and have a certain willingness to work in agriculture. And they possess the potential and possibility to become new professional farmers. We define this specific group as young part-time farmers. According to the 2020 China National High-Quality Farmers Development Report [2], the main body of professional farmers are the young migrant workers. Promoting the professional transformation of young part-time farmers from traditional farmers to professional farmers with a certain social status, market position, and higher income is significant in China's rural revitalization. Therefore, this paper discusses the key factors that influence the professional farming of young part-time farmers and the route to attract and improve their professional level.

The studies on “young part-time farmers” mainly focus on “young part-time farmers” and “farmers' willingness to professionalize”. Firstly, concerning studies on young part-time farmers, most scholars have analyzed the characteristics of part-time farmers and the impact of part-time farming on the sustainable development of agriculture. Part-time farmers are groups of migrant workers who work part-time to help their families with farming and harvesting during the busy season and work outside the home during the

lean season to increase family income [3,4]. Some scholars analyzed the main characteristics of part-time farmers and found that part-time farmers are relatively young, have a higher level of education, have a higher total household income, operate smaller farms, and have other characteristics. In terms of the relationship between part-time farming and sustainable agricultural development, some scholars believe that the higher the degree of part-time farming, the stronger their willingness to adopt conservation agriculture techniques and large-scale land management [5,6], so part-time farming will ultimately contribute to increased food production in the long run and can contribute to sustainable agricultural development [7]. In contrast, some scholars believe that part-time farming may lead to a shortage in the supply of agricultural labor, which will impede the sustainable development of agriculture. Therefore, measures need to be taken to increase the number of farms [8]. Therefore, measures such as increasing agricultural subsidies and strengthening professional training for farmers must be taken to promote sustainable agricultural development [9]. Secondly, regarding the research on “willingness to professionalize agriculture”, most researchers mainly use social cognitive theory, social network theory, planned behavior theory, and other theories to analyze farmers’ willingness to professionalize agriculture. Valizadeh et al. (2019) and Savari et al. (2022) used social cognitive theory to analyze farmers’ willingness to produce sustainably. They concluded that factors such as farmers’ social and structural backgrounds, as mentioned in social cognitive theory, can enhance farmers’ willingness to ensure sustainable agricultural production [10,11]. Lockie (2006) and Coughenour (2003) used social network theory to analyze the relationship between farmers’ identity perceptions and conservation farming, arguing that conservation farming is not only the result of the extension of agricultural science but also the result of new perceptions of farmers’ occupational identities and agricultural production systems that emerge from social network interactions among groups of farmers [12,13]. Sharifzadeh et al. (2012) analyzed farmers’ use of climate information by linking attitudes and behaviors based on the expansion of the Theory of Planned Behavior (TPB), suggesting that farmers’ attitudes and willingness to use climate information are antecedents of information use behavior [14]. In addition, some scholars use the theory of rational smallholder farmers, the theory of bounded rationality, or complementary analyses of the willingness to professionalize agriculture based on existing research [15]. It can be seen that the existing studies are relatively rich in content and provide a good research foundation. However, due to the lack of theoretical support and a practical and clear logical analysis framework, the existing research is scattered and not systematic, and the research conclusions do not agree. Push–pull theory, as a meso-motivational theory, was mainly used in early studies to explain population and labor migration [16–18]. Various derivative theoretical frameworks, including the Two-Way Push–Pull (TWPP) model, have appeared as the theory has developed. The model pursues the dynamic equilibrium of various stress factors to a higher degree than derivative frameworks and has been broadly applied in pedagogy and tourism in recent years. Regarding the professionalization of young part-time farmers, the TWPP model can explain regional migration and the evolution of young part-time farmers to professional farmers from the spatial dimension. And the TWPP model can also explain the dynamic movement process of professional farming of young part-time farmers from the time dimension, which has plenty of research space and appropriateness.

This paper uses the push–pull theory to construct a TWPP model. We take young part-time farmers as the research object. And we build a binary logistic regression model of multi-dimensional influencing factors based on the survey data of Chongqing and Tianjin municipalities to analyze the key influencing factors of young part-time farmers’ willingness to professionalize farming, and to provide targeted policy recommendations for accurately guiding young part-time farmers to professionalize farming, efficiently use and revitalize rural human resources and social capital, and cultivate high-quality young professional farmers. This paper is organized as follows: Section 1 introduces the research background and theory model. Section 2 introduces the analytical framework and presents the research hypotheses. Section 3 presents the analytical methodology.

Section 4 presents the results of the analysis. Section 5 tests the hypotheses and makes policy recommendations, and Section 6 concludes this paper.

2. Analytical Framework and Research Hypotheses

2.1. The TWPP Model of the Professionalization of Young Part-Time Farmers

The core stress elements in the TWPP theoretical and analytical framework are generally discussed, involving the political, economic, social, cultural, and many other aspects. The pull factors of inflow areas refer to several positive factors that can attract the population to move to the destination [19], mainly involving a stable government [20], harmonious social and political environment [21–23], good employment opportunities [24,25], better occupational development [26,27], higher income [28], better educational level [27,29,30], excellent living conditions [31–33], and so on. The pushing force of outflow areas is among the factors that have inverse influences on people's quality of life indicators [19], mainly focusing on some political factors such as religious or racial oppression [34]; economic factors such as unemployment [25,35] and personal development opportunities [25,36,37]; natural factors such as the depletion of natural resources [38,39], natural disasters, and epidemic diseases [40,41]; and environmental features including a superior living environment [25,42], comfortable climate [43], and cultural atmosphere [31,44]. The resistance force of outflow areas hinders population migration, involving the happiness of family reunions [45], the familiar community environment, the long-term social network formed in the place of birth and growth [22], and so on. In addition, several push factors not conducive to population immigration also exist in inflow areas, such as family separation [46], a strange production and living environment, fierce competition, and quality of life decline [47].

Under the effect of these macroscopic factors, there is still the fact that people in the same place, affected by the same two forces and pulls, make different migration decisions. Therefore, it is necessary to consider the two questions below. Firstly, the same factor might differ for different or potential immigrants. The decision to migrate has never been rational, and the composition of rationality is far smaller than that of irrationality. So, how do the rational and irrational factors play a role in the migration decision of young concurrent farmers? How much of a role do the factors play? Secondly, for those young farmers, there is a strong flow of motivation under the same conditions. Still, other factors may cause them to be unable to achieve their migration or flow targets, such as some less-educated young part-time farmers, underdeveloped social networks, the high cost of labor force flow, and existing credit constraints. This shows that what kind of economic position you are in and what kind of personal or family features the household or an individual who participates in labor force mobility possess are not problems that can be determined in advance in theory and are problems that need to be clarified in empirical research.

In reality, population migration is usually closely related to career choice. Professional farming accompanies family relocation and changes in the living environment and livelihood sources. The rural pulling force is among the rural developmental factors, referring to the attraction of agriculture and rural areas primarily stemming from the development potential and natural attributes of agriculture and rural areas. The rural repulsion force refers to restrictive rural development and weak factors because of the geographical location, industrial structure, and other aspects. The urban pushing force is the factor that can affect the quality of life of young part-time farmers, mainly including the economic weakness and identity weakness from living in urban areas. Urban resistance force is the attachment factor of young part-time farmers, and psychological and spiritual dependence is essential. Based on this, the conceptual TWPP model of professionalization of young part-time farmers is constructed, as shown in Figure 1.

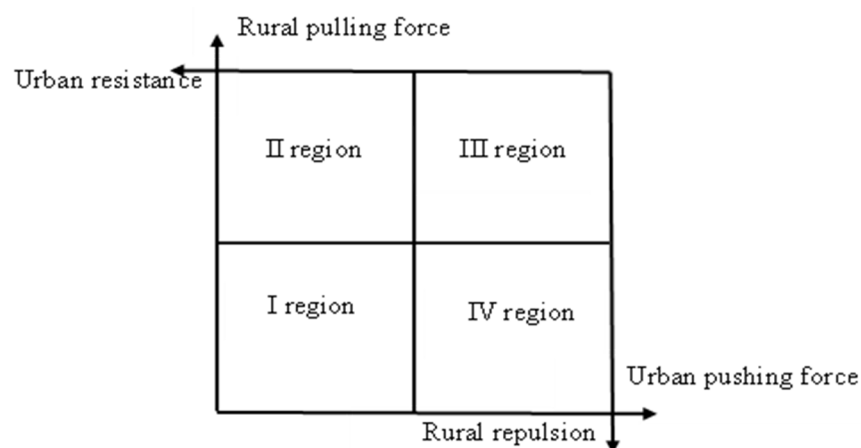


Figure 1. TWPP model of professional farming of young part-time farmers.

The pushing force of the outflow areas (urban areas) and the pulling force of the inflow areas (rural areas) are in dominant positions, and the role of “the repulsion of the inflow area (rural)” and “the resistance of the inflow areas (rural areas)” is relatively limited. In the I region, the inflow areas have a weak pulling force and strong repulsion, and the outflow areas have a weak pushing and strong resistance. Under this condition, young farmers may abandon agricultural production, with the minimal possibility of professional farming. By contrast, in the III region, rural areas have a strong pulling force, weak repulsion, and strong net pulling force, and urban areas have a strong pushing force, weak resistance, and strong net pushing force. The attraction of rural areas is far greater than that of cities and towns, creating sufficient conditions for transforming young part-time farmers into professional farmers. So, the III region is the high-probability area for farmers to take the initiative to choose to become professional farmers. In the II regions, the inflow areas have a strong pulling force and weak repulsion with a positive net pulling force. The outflow areas have a weak pushing and strong resistance with an opposing net pushing force. In the IV region, the inflow areas have a weak pulling force and strong repulsion with an opposing net pulling force, and the outflow areas have a strong pushing force and weak resistance. In both cases, farmers are in the wait-and-mode and are more likely to remain part-time.

2.2. Research Hypotheses

2.2.1. Rural Pulling Force

The government’s support policies for agriculture are the pivotal driving force to propel the flow of resource elements to agriculture [48,49]. It can facilitate the adjustment of industrial structure and transform the mode of agricultural management from the system. It can also push the reform of the resource allocation mode, improve the market system, and then improve the efficiency of agricultural production. Policy support also helps to keep energy and agricultural prices stable, prompting farmers to maintain positive expectations of returns on investment and increasing their incentives for agricultural production. It is a necessary and sufficient condition of professional farming for young part-time farmers. Agricultural industrialization means there will be more intermediate and final products, which also means the profit margin of agricultural production will increase significantly. The countryside is essential for young part-time farmers’ complex social network relationships [50,51]. Young part-time farmers with local complexes have a more vital ability to obtain information and mobilize resources in their social networks. This social capital may share the cost of becoming a professional farmer and reduce their resistance to becoming a new professional farmer. These constitute the conditions for young part-time farmers to evolve into professional farmers actively. To sum up, the following research hypotheses are proposed:

H1(a). *The greater the policy support, the greater the possibility of the evolution of young part-time farmers into professional farmers.*

H1(b). *The higher the level of agricultural industrialization, the greater the possibility of the evolution of young part-time farmers into professional farmers.*

H1(c). *The more robust the local complex is, the greater the possibility of developing young part-time farmers into professional farmers.*

2.2.2. Rural Repulsion

The transfer of labor force is a rational economic behavior driven by comparative economic benefits, and the transfer of people aims to maximize material benefits. Agriculture is a typical high-risk industry, farmers' economic foundation is weak, and their risk-bearing capacity is generally low [52,53]. So, concurrent business is a way to effectively avoid risks. The traditional thought of small farmers is inevitably impacted by industrial culture. The relevant empirical research also shows that farmers' professional confidence and love for agriculture can well reflect farmers' professional willingness [54–58]. For those who think that farming is difficult, growing grain is a low-level industry, and it is not very comfortable to return to the countryside to farm. They have a very low willingness to perform farming. Even in developed countries with small regional disparities in economic development, mechanisms for the movement of education objectively exist [59–62]. Young part-time farmers are more favorable toward their children's education investment. To sum up, the following research hypotheses are put forward:

H2(a). *The lower the agricultural incomes are, the less likely it is for young part-time farmers to return home and become professional farmers.*

H2(b). *The greater the risk of agricultural management is, the less likely it is for young part-time farmers to return home and become professional farmers.*

H2(c). *The lower the sense of professional identity with farmers is, the less likely it is for young part-time farmers to return home and become professional farmers.*

H2(d). *The more attention that is paid to the educational attitude of children, the less likely it is for young part-time farmers to return home and become professional farmers.*

2.2.3. Urban Pushing Force

The social security level of young part-time farmers is significantly lower than that of local urban residents because of the dual weaknesses of "difference between inside and outside" caused by places of domicile and "distinctions between urban and rural areas" caused by different types of household registration, hindering their willingness to remain in cities and towns for a long time. A stable residence helps to establish a firm and lasting bond of relations. It promotes the accumulation and growth of favorable factors such as trust and reciprocity in social interaction, an essential way for individuals to gain survival value [63–65]. But most of the young farmers live in the dormitory provided by the units, and the proportion of housing purchases for them is low. Also, they are disadvantaged over the residents regarding housing area, facilities, and community environment. The current situation of "living outside the community and value stripping of living" makes it short-term, changeable, and temporary that young part-time farmers live and work in cities and towns [66,67]. Why do some part-time farmers have the most significant family income but never choose the whole family migration? The classical labor migration model assumes that the migration cost is zero, so it cannot be enough to explain this phenomenon. For young part-time farmers, the cost of labor migration is higher than that of rural areas. To sum up, the following research hypotheses are put forward:

H3(a). *The lower the level of urban social security, the higher the possibility of young part-time farmers becoming professional farmers.*

H3(b). *The worse the urban living conditions are, the higher the possibility of young part-time farmers becoming professional farmers.*

H3(c). *The higher the costs of living in cities and towns for young farmers, the higher the possibility of young part-time farmers becoming professional farmers.*

2.2.4. Urban Resistance

The development economics theory believes that in transforming from a dual economic structure to a modern one, gaining higher wages is the leading driver of population migration from the agricultural sector to the urban industrial sector [68–72]. Most studies have found that obtaining higher non-agricultural incomes in cities and towns is the most significant driving force for agricultural migrants to move into urban areas [73–76]. The theory of “foot voting” thinks that the labor force can express their preference for public services according to the combination of public service expenditure and tax burden provided by local governments [77,78]. Public services in inflow areas are not entirely exclusive to the migrants. China’s small cities, towns, and organic towns have recently canceled household settlement restrictions. Suppose the labor force orderly flows to small- and medium-sized towns through the guidance policies. In that case, they can obtain household registration and related public services. In the theoretical analysis of social identity, individuals classify themselves into a specific social category through the path of social identity. Through this, they can complete the classification of social groups of subjects and then embed in a specific social structure. There are always differences in identity between urban and rural areas in China, and the “progressiveness” of the urban lifestyle has become the perfect life that farmers expect. To sum up, the following research hypotheses are put forward:

H4(a). *The higher the non-agricultural income, the less likely young farmers are to return to their homes to become professional farmers.*

H4(b). *The higher the degree of dependence of young part-time farmers on public services, the less likely they are to return to their homes to become professional farmers.*

H4(c). *The higher the sense of identity of young part-time farmers to urban life, the less likely it is for them to return to their homes to become professional farmers.*

3. Materials and Methods

3.1. Study Areas and Data Sources

3.1.1. Overview of the Study Areas

We gathered data from Chongqing and Tianjin, and the location map of the study area is shown in Figure 2. Chongqing is the municipality directly under the Central Government in western China, located in the economic center of the upper reaches of the Yangtze River, which belongs to the typical large urban areas with large rural areas with rapid urbanization. Still, its agricultural transfer population has not been fully integrated into the city. From 2000 to 2017, the semi-urbanization rate of the Chongqing population remained at a high level of more than 10%, and the phenomenon of migrant workers of young farmers was prominent. Tianjin is the center of the Bohai Rim Economic Circle and an essential part of the Beijing–Tianjin–Hebei urban agglomeration. It is a typical industrial city that has entered a sound stage where the level of urbanization exceeds 70%, tends to be stable, and presents a connotative development. The research group selected Liangping District, Yongchuan District, and Dazu District from the northeast and west of Chongqing, and Jizhou District and Jinghai District from Tianjin to research according to the diversity of per-capita agricultural income, the level of urbanization, the level of industrial development, geographical position, and features in different regions.



Figure 2. Location map of the study area.

3.1.2. Data Sources

The research group selected 13 towns and 16 villages from 5 districts to investigate and adopted purposeful sampling and semi-structured interviews in light of crop production types, location characteristics, industrial development, and other indicators. Respondents were part-time farmers who remained and worked in the area. With the assistance of the local land and agriculture department and the village cadres, 20–30 questionnaires were distributed to young part-time farmers in each village, and 372 were officially distributed. After eliminating the invalid ones, 310 valid questionnaires were recovered, and the effective rate was 83.3%. From the sample coverage, the agricultural production and management of the essential suburbs and traditional agricultural areas had two different location characteristics. Various crops such as rice, corn, wheat, tea, oil, roses, and rosemary were planted. After interviewing local village cadres, the group further understood the current situation of young farmers and professional farming to ensure the data's authenticity and reliability.

3.2. Model Approach

The data adopted in this research are mainly classified data. It is an ideal estimation method to use a probability model to analyze discrete selection problems. “Young farmers’ willingness to professionally work in agriculture” is set into binary variables, including “unwillingness” and “willingness”, and based on this, a binary logistic regression model is

established. In this model, the dependent variable “ Y ” means the willingness of part-time farmers to farm professionally, and “ $Y = 0$ ” means that young farmers are not willing to work professionally and “ $Y = 1$ ” means that they are willing to work professionally. The form of the model function is that the probability of the “willingness” to become a professional farmer is P , and that of “unwillingness” is $1 - p$. The ratio of the probability of occurrence to the probability of non-occurrence, which is $P/(1 - p)$, can be converted using nonlinear logit, and the following analysis model can be built:

$$Y = \ln\left(\frac{P}{1-p}\right) = \beta_0 + \sum_{i=1}^k \beta_i x_i + \mu = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \cdots \beta_{16} x_{16} + \mu$$

where β_0 represents the regression intercept. μ means random disturbance. x_i represents the explanatory variable matrix. x_1 – x_2 are the control variables. x_3 – x_{15} are dependent variables. $\beta_1, \beta_2, \dots, \beta_{16}$ are the regression coefficients of the corresponding explanatory variables, which show the action direction and influence level of the explanatory variable on the dependent variable.

3.3. Selection of Variables

The author adds personal factors as control variables based on extensive reference to relevant research based on comprehensiveness, typicality, and interpretability principles. We select 19 indicators of factors that affect the willingness of young part-time farmers to professionalize farming from five dimensions. The members of the research group and relevant experts are invited to set up an advisory group. After in-depth interviews and three questionnaires, five categories and 15 influencing factors are determined through comprehensive sifting and screening. Thus, we establish a relatively straightforward indicator system for young part-time farmers’ willingness to work professionally in agriculture (Table 1).

Table 1. Definition of variables and statistical description.

	Definition Name	Definition of Variables and Assignment	Mean	Standard Deviation
Control variables	Age (X1)	Numerical data are based on actual values	39.43	5.80
	Level of education (X2)	Junior high school and below = 1; senior high school = 2; junior college = 3; above the junior college = 4	1.59	0.75
Rural pulling force	Agricultural policy support (X3)	No or don’t know = 1; smaller = 2; generally = 3; bigger = 4; very big = 5	2.80	1.18
	Local complex (X4)	Very dislike = 1; kind of dislike = 2; generally = 3; kind of like = 4; very like = 5	2.90	1.05
	Agricultural industrialization (X5)	Very low = 1; relatively low = 2; generally = 3; relatively high = 4; very high = 5	2.33	0.97
Rural repulsion	Annual agricultural income (X6)	10,000 and below = 1; 10,000–30,000 Yuan (CNY) = 2; 30,000–50,000 Yuan (CNY) = 3; 50,000–70,000 Yuan (CNY) = 4; 70,000 Yuan (CNY) and above = 5	1.23	0.44
	Agricultural management risk (X7)	Very small = 1; relatively small = 2; generally = 3; relatively big = 4; very big = 5	3.21	0.90
	Professional identity (X8)	Disagree = 1; relatively disagree = 2; generally = 3; relatively agree = 4; agree = 5	3.20	1.11
	Children’s education (X9)	No children attending school = 1; generally = 2; relatively care = 3; very care = 4	2.35	1.19

Table 1. Cont.

	Definition Name	Definition of Variables and Assignment	Mean	Standard Deviation
Urban pushing force	Urban social security (X10)	Very low = 1; generally = 2; relatively high = 3	1.85	0.67
	Urban housing (X11)	Don't have = 1; have = 0 10,000 and below = 1; 10,000–30,000 Yuan (CNY) = 2; 30,000–60,000 Yuan (CNY) = 3; 60,000–90,000 = 4; 90,000 and above = 5	0.29	0.46
	Urban cost of living (X12)		1.65	0.68
Urban resistance	Non-agricultural income (X13)	30,000 and below = 1; 30,000–60,000 Yuan (CNY) = 2; 60,000–90,000 Yuan (CNY) = 3; 90,000–120,000 Yuan (CNY) = 4; 120,000 and above = 5	2.20	1.14
	Dependence on public services (X14)	independent = 1; kind of independent = 2; generally = 3; kind of dependent = 4; very dependent = 5	3.35	0.98
	Urban identity (X15)	Yes = 1; no = 0	39.43	5.80

3.3.1. Dependent Variable

According to the research content of this paper, the willingness of young part-time farmers to work professionally in agriculture is taken as the explanatory variable and expressed as the letter Y. “Y = 0” means “no” and “Y = 1” means “yes”.

3.3.2. Core Independent Variable

- (1) Rural pulling force. Three variables are set up: agricultural policy support, local complex, and agricultural industrialization.
- (2) Rural repulsion. Generally, low agricultural income, a weak sense of professional identity, high risks of agricultural management and rural areas lagging in educational opportunities, teachers' level, and teaching conditions are the real shortcomings in the development of rural areas. Four variables are set up: agricultural incomes, the risks of agricultural management, the sense of professional identity, and children's education.
- (3) Urban pushing force. The lack of working units and social security in cities, difficulty in purchasing houses and terrible living environment, and expensive living costs in cities and towns are a true reflection of the phenomenon that young part-time farmers cannot be assimilated into the cities. As a temporary residence certificate, the urban residence permit can protect the rights and interests of young part-time farmers in education, employment, welfare, and other aspects.
- (4) Urban resistance. The relatively high income of workers, the perfect public service, and the identity of “urban people” make the young part-time farmers feel safe and satisfied.

3.3.3. Control Variable

The control variable selects two indexes, age and education. As age increases, the risk of preference of young part-time farmers weakens, and young farmers will regard professional farming as their employment choice, given that non-agricultural employment is not dependent. The educated young part-time farmers have more non-agricultural employment opportunities.

3.3.4. Collinearity Diagnosis

A multiple collinearity diagnosis of the variables is required to avoid multiple collinearities among the variables in the model and to avoid affecting the model's accuracy. The research uses SPSS 26.0 to conduct a comparative analysis and extracts the variance infla-

tion factor (VIF) and tolerance shown in Table 2. The maximum value of VIF is 1.55, less than 10; and the minimum tolerance is 0.64, more significant than 0.1. Thus, it is argued that all the variables selected by the model pass the heavy collinearity test and that all the variables can be incorporated into the binary logistics regression model simultaneously by diagnosing multiple collinearities.

Table 2. Multiple collinearity diagnosis.

Variables	Tolerance	VIF	Variables	Tolerance	VIF
Age (X1)	0.66	1.52	Children’s education (X9)	0.78	1.29
Level of education (X2)	0.72	1.40	Urban social security (X10)	0.71	1.42
Agricultural policy support (X3)	0.86	1.17	Urban housing (X11)	0.73	1.36
Local complex (X4)	0.90	1.11	Urban cost of living (X12)	0.64	1.55
Agricultural industrialization (X5)	0.80	1.26	Non-agricultural income (X13)	0.75	1.33
Annual agricultural income (X6)	0.87	1.15	Dependence on public services (X14)	0.73	1.38
Agricultural management risk (X7)	0.89	1.12	Urban identity (X15)	0.80	1.25
Professional identity (X8)	0.75	1.34			

3.4. Model Testing

3.4.1. Reliability and Validity Analyses

Since the reliability analysis only applies to numerical variables, a Likert scale of nine questions is selected for the willingness to influence factors, and the questionnaire is standardized. Then, Cronbach’s alpha reliability coefficient is calculated. The results are shown in Table 3. The results of the reliability coefficient test show that Cronbach’s alpha reliability coefficient value is 0.85, $0.8 < \alpha \leq 0.9$, which represents a credibility of 85% for the results. It indicates that the survey data are highly credible and can be analyzed empirically. The results of the validity analysis are shown in Table 4. As can be seen from the test results in Table 4, the KMO value of the data obtained from this survey is 0.83, which is greater than the standard of 0.7, indicating more information for measurement. The p -value of Bartlett’s test of sphericity is 0.03, which is less than the level of 0.05. Thus, it indicates that the data obtained from the survey are of good validity, i.e., empirical analyses based on this basis can obtain the expected results.

Table 3. Test of reliability coefficient.

Reliability Statistics	
Cronbach α reliability coefficient	Item count
0.85	9

Table 4. KMO and Bartlett sphericity tests.

KMO Sample Suitability Quantity		0.83
Bartlett’s test of sphericity	Approximate chi-square	5197.43
	Degrees of freedom	325
	Significance	0.03

3.4.2. Goodness of Fit Test

Goodness-of-fit tests are used to test the fit of the regression model to the training sample set. The first way is to evaluate the goodness-of-fit effect quantitatively using the deviation value. The metric used is the -2 log-likelihood value. The second way is to test the qualitative goodness-of-fit effect using Hosmer and Lemeshow. The third way is the misclassification matrix test. In the quantitative evaluation of the goodness-of-fit effect, according to the statistics of model fit shown in Table 5, the log-likelihood function value for the -2 -fold is 254.38, which is a more satisfactory fit for this model. The Cox and Snell

R-squared value and Nagelkerke R-squared value of 0.30 and 0.52, respectively, would indicate that the model explains 52.8% of the variation in the variables, which re-validates the fit of the model. In the qualitative evaluation of the effect of goodness of fit, according to the data shown in the Hosmer–Lemeshow test in Table 6, the chi-square value is 13.26, which is less than 15.50. The p -value is 0.21, which is greater than 0.05, so the test is judged to be significant, indicating the use of the available information to achieve a complete fit of the model while explaining the model variance and that the effect of model fit is better. In the judgment error matrix test, according to Table 7, 152 of the 209 people who chose not to be willing to work professionally in agriculture are correctly predicted, which is a correct prediction rate of 72.73%, and 23 of the 101 people who chose to be willing to work professionally in agriculture are incorrectly judged as not willing to work professionally in agriculture. The total correct prediction rate of the model is 74.19%. The degree of model fit is relatively satisfactory.

Table 5. Model summary.

Step	−2 Log-Likelihood	Cox and Snell R ²	Nagelkerke R ²
5	254.38	0.30	0.52

Table 6. The Hosmer–Lemeshow test.

Step	Chi-Square	Df	Sig.
5	13.26	8	0.21

Table 7. Predictive classification table.

Observed			Projected		
			Willingness to Professionalize Farming Unwilling	Willing	Percentage Correct
Step 5	Willingness to professionalize farming	Unwilling	152	57	72.73%
		Willing	78	23	77.23%
	Overall percentage				74.19%

4. Results

4.1. Sample Characteristics

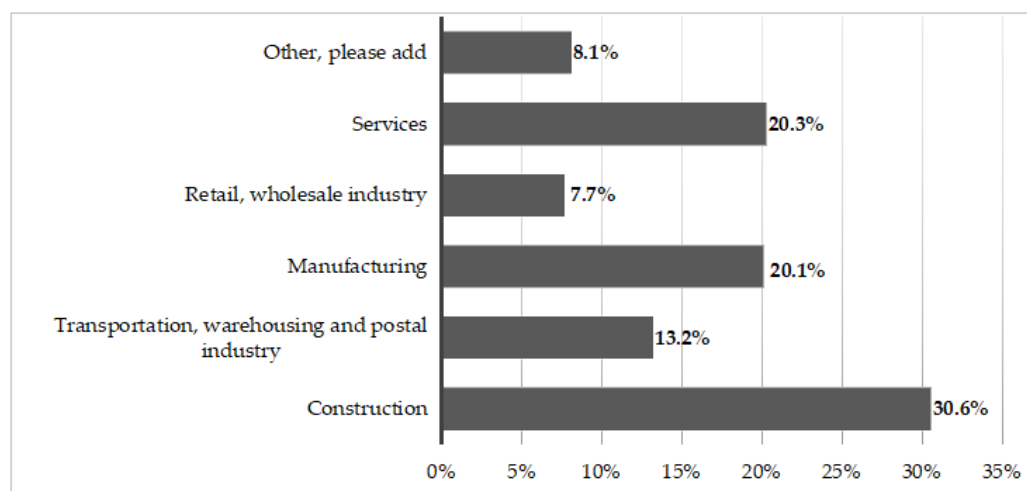
Personal and family characteristics are shown in Table 8. The respondents were mainly 36–45 years old, among whom junior and high school students represented a significant proportion. The proportion of junior college students and above was almost zero. From the perspective of family population, the total household population of young part-time farmers surveyed reached 2–7, and three-person and four-person families accounted for the most.

Characteristics of part-time jobs are shown in Figure 3, which indicates that the main sectors in which young part-time farmers work are construction, services, and manufacturing, accounting for 30.6%, 20.3%, and 20%, respectively. The two sectors are the transportation, warehousing, and postal industry, accounting for 13.2%, and the retail and wholesale industry, accounting for 7.7%. According to the research data, the gender of young part-time farmers is closely related to the distribution of farmers' part-time industries. Women are mainly engaged in manufacturing and service industries, while men are mainly distributed in the construction, transportation, warehousing, and postal industries. Farmers' income from part-time jobs is in the middle and lower levels. The most significant number of people earn between USD 30,000 and 60,000 (about USD 4200–8400), accounting for 40.6%. The number of people above 120,000 (about USD 16,800) is the lowest, accounting for only 5.8% (Figure 4).

Table 8. Personal and family characteristics of young part-time farmers.

Variables	Items	Frequency [People, Proportion]
Age	18–27	21 (6.8%)
	27–36	97 (31.3%)
	36–45	192 (61.9%)
Level of education	Junior high school and below	178 (57.4%)
	Senior high school	102 (32.9%)
	Junior college	23 (7.4%)
	Junior college and above	7 (2.3%)
Number of family members	Two persons	37 (11.9%)
	Three persons	113 (36.5%)
	Four persons	68 (21.9%)
	Five persons	53 (17.1%)
	Six persons	37 (11.9%)
	Seven persons	2 (0.6%)

The research group investigated the production and management situations of 310 young farmers and found that the contracted land area of young concurrent farmers is between 0 and 6000 m², and there is no scale management. Among them, 1000–2000 m² is the most, accounting for 33.2%; this is followed by 2000–3000 m², which accounts for 24.1%; and 6000 m² or more is the smallest, accounting for only 1.9% (Figure 5). Young farmers mainly grow rice, corn, and other food crops. Their income from agricultural production and management is not optimistic. The agricultural income of most young part-time farmers is below 10,000 Yuan CNY (about USD 1400), accounting for 77.7%; 10,000–30,000 Yuan CNY (about USD 1400–4200), accounting for 20.6%; and 30,000–50,000 Yuan CNY (about USD 4200–7000), accounting for 1.6%. Regarding agricultural production costs, the input cost of agricultural production is relatively low for most young part-time farmers. The most significant number has input costs of less than 1000 Yuan CNY (about USD 140), accounting for 49%, and that which is between 4000 and 5000 Yuan CNY (about USD 560–700) accounts for 12.9% (Table 9). Among them, fertilizer spending and machine leasing fees take the most significant proportion, reaching 27% and 26%, respectively. The proportion of the land cost, irrigation fee, and pesticide fee accounts for relatively small proportions of 6%, 5%, and 4%, respectively (Figure 6).

**Figure 3.** Distribution situation of part-time industries.

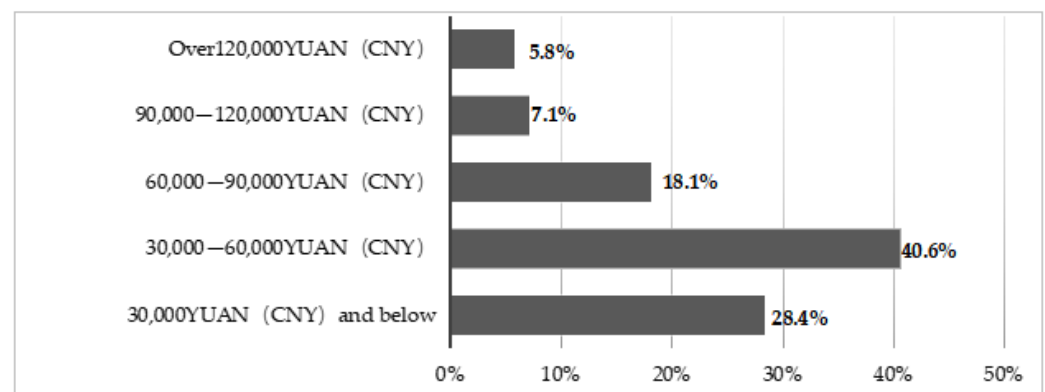


Figure 4. Conditions of non-agricultural income.

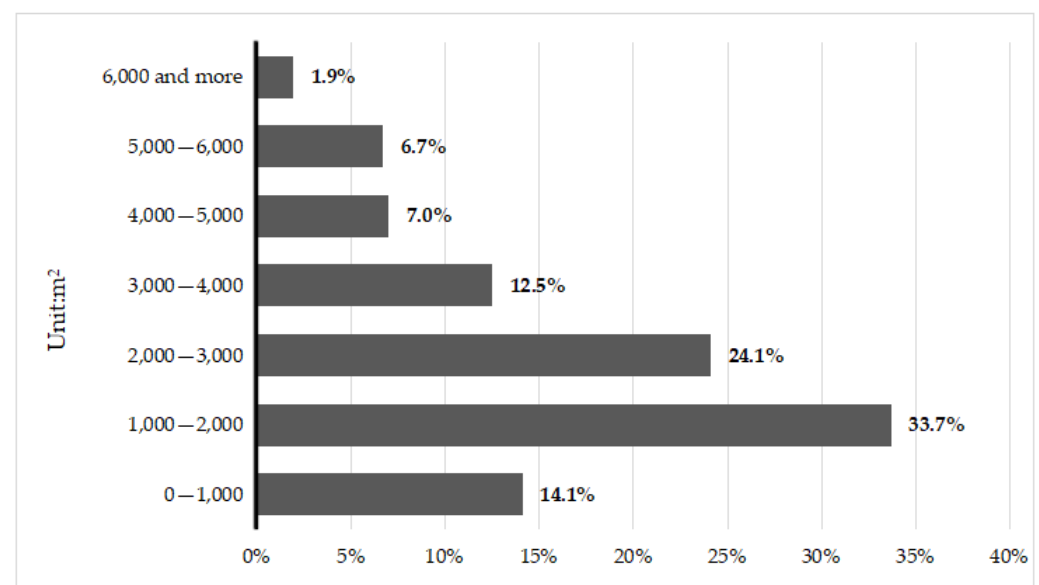


Figure 5. The contracted land area of young part-time farmers.

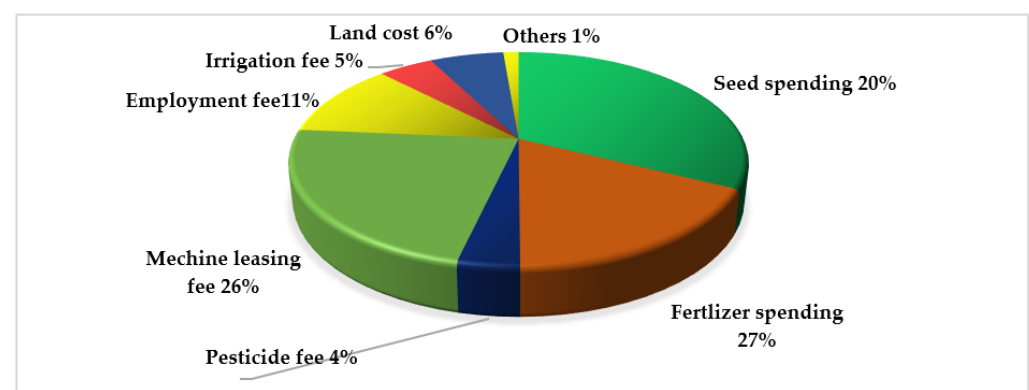


Figure 6. Distribution graph of agricultural production cost.

Table 9. Agricultural income and costs for young part-time farmers.

Variables	Items	Frequency (People, Proportion)
Agricultural income	Less than 10,000 Yuan (CNY)	241 (77.7%)
	10,000–30,000 Yuan (CNY)	64 (20.6%)
	30,000–50,000 Yuan (CNY)	5 (1.6%)
Agricultural production costs	Less than 1000 Yuan (CNY)	152 (49%)
	1000–2000 Yuan (CNY)	49 (15.8%)
	2000–3000 Yuan (CNY)	41 (13.2%)
	3000–4000 Yuan (CNY)	28 (9%)
	4000–5000 Yuan (CNY)	40 (12.9%)

4.2. Descriptive Statistics

The research results found that among 310 young part-time farmers, 101 are willing to work professionally in agriculture, accounting for 32.6%. In comparison, 209 farmers are unwilling to work professionally, accounting for 67.4%. Learning from the current research findings, the research group compared and analyzed the willingness of young part-time farmers to farm professionally according to their characteristics, family characteristics, and essential conditions of contracted land.

The willingness of young part-time farmers to farm professionally of different ages can be seen from Table 10, where the proportion of the willingness of young part-time farmers of different ages to work professionally in agriculture (the number of people willing to migrate/the total number of respondents) is different. Young farmers aged 36–45 willing to work professionally account for 24.5%, higher than 5.8% of those aged 27–36. And the percentage of young farmers aged 18–27 willing to farm professionally is 2.3%. These data show that the older the young farmers, the higher their willingness to farm professionally.

Table 10. The relationship between the willingness of young part-time farmers to farm professionally and their ages.

The Willingness of Professional Farming	The Population of Different Age Groups (Population, Proportion of Respondents)			
	Aged 18–27	Aged 27–36	Aged 36–45	Total
No	14 (4.5%)	79 (25.5%)	116 (37.4%)	209 (67.4%)
Yes	7 (2.3%)	18 (5.8%)	76 (24.5%)	101 (32.6%)

The willingness of young part-time farmers to farm professionally with different levels is shown in Table 11 and shows that 119 young farmers with junior high school education or below are willing to work professionally in agriculture, accounting for 19%. There are three young farmers with a junior college education and above willing to farm professionally, whose proportion is 1%. So, it can be indicated that the higher the educational level, the lower the willingness of young farmers to work professionally.

Table 11. The relationship between the willingness of young part-time farmers to farm professionally and their educational level.

The Willingness of Professional Farming	The Population of Different Education Groups (Population, Proportion of Respondents)				
	Junior High School and Below	Senior High School	Junior College	Above Junior College	Total
No	119 (38.4%)	66 (21.3%)	20 (6.5%)	4 (1.3%)	209 (67.4%)
Yes	59 (19%)	36 (11.6%)	3 (1%)	3 (1%)	101 (32.6%)

From the willingness of young part-time farmers to farm professionally in different industries in Table 12, it can be concluded that young farmers working in the construction

industry have the highest willingness to farm professionally, with a proportion of 11.6%. The following are the farmers working in manufacturing and service industries, with 7.4% and 5.8%, respectively. The small proportion of young farmers in retail and wholesale industries is 1.9%.

Table 12. The relationship between the willingness of young part-time farmers to farm professionally and their employment industries.

The Willingness of Professional Farming	The Population of Different Industry Groups (Population, Proportion of Respondents)						Total
	Construction Industry	Transportation, Warehousing, Postal Industry	Manufacturing Industry	The Retail and Wholesale Industry	Service Industry	Others	
No	59 (19%)	30 (9.7%)	39 (12.6%)	18 (5.8%)	45 (14.5%)	18 (5.8%)	209 (67.4%)
Yes	36 (11.6%)	11 (3.5%)	23 (7.4%)	6 (1.9%)	18 (5.8%)	7 (2.3%)	101 (32.6%)

The willingness of young part-time farmers with different non-agricultural incomes to farm professionally is shown in Table 13, it and shows that 51 young part-time farmers with a non-agricultural income of 30,000 Yuan CNY (about USD 4200) or less are willing to work professionally in agriculture, accounting for 16.5%. That of young farmers with a non-agricultural income of 120,000 (about USD 16,800) and above is 0.6%. It can be seen that the higher the non-agricultural income level of young part-time farmers is, the lower the willingness of young farmers to work professionally.

Table 13. The relationship between the willingness of young part-time farmers to farm professionally and non-agricultural income.

The Willingness of Professional Farming	The Population of Different Non-Agricultural Income Groups (Population, Proportion of Respondents)					Total
	30,000 Yuan (CNY) and below	30,000–60,000 Yuan (CNY)	60,000–90,000 Yuan (CNY)	90,000–120,000 Yuan (CNY)	Above 120,000	
No	37 (11.9%)	91 (29.4%)	47 (15.2%)	18 (5.8%)	16 (5.2%)	209 (67.4%)
Yes	51 (16.5%)	35 (11.3%)	9 (2.9%)	4 (1.3%)	2 (0.6%)	101 (32.6%)

The total population impacts the willingness of young part-time farmers to farm professionally, as shown in Table 14, where the proportion of young part-time farmers with a family population of three is highest at 10.6%, that of four is 7.7%, and that of seven is the lowest at 0.6%. It can be seen that the proportion of young farmers with a family population of 3 and 4 is slightly higher than that of other populations. The distance from cities and towns impacts the willingness of young part-time farmers to farm professionally. It can be found from Table 15 that the proportion of young part-time farmers 10–15 km away from cities and towns who are willing to farm professionally is 10.3%, that of 15–20 km is 9%, and that of 20–25 km is 0.6%. Thus, it is clear that the farther away from cities and towns, the lower the willingness of young farmers to work professionally.

Table 14. The relationship between the willingness of young part-time farmers to farm professionally and different total populations.

Willingness	The Population of Different Total Family Population Groups (Population, Proportion of Respondents)						Total
	Two Persons	Three Persons	Four Persons	Five Persons	Six Persons	Seven Persons	
No	23 (7.4%)	80 (25.8%)	44 (14.2%)	38 (12.3%)	24 (7.7%)	0 (0%)	209 (67.4%)
Yes	14 (4.5%)	33 (10.6%)	24 (7.7%)	15 (4.8%)	13 (4.2%)	2 (0.6%)	101 (32.6%)

Table 15. The relationship between the willingness of young part-time farmers to farm professionally and the distance between villages, cities, and towns.

The Willingness of Professional Farming	The Population of Different Distances between Villages and Cities and Towns Group (Population, Proportion of Respondents)					
	5–10 km	10–15 km	15–20 km	20–25 km	25–30 km	Total
No	22 (7.1%)	36 (11.6%)	89 (28.7%)	8 (2.6%)	54 (17.4%)	209 (67.4%)
Yes	24 (7.7%)	32 (10.3%)	28 (9%)	2 (0.6%)	15 (4.8%)	101 (32.6%)

The impact of different contracted areas on the willingness of young part-time farmers to farm professionally is indicated in Table 16. The proportion of young part-time farmers with a family-contracted land area of 2000–3000 m² and 5000–6000 m² is much higher than that of other contracted land areas. Excluding the population base factor, it can be said that the young part-time farmers with comparatively larger families' contracted land are more likely to be professional farmers. The impact of different agricultural incomes on the willingness of young part-time farmers to farm professionally is shown in Table 17, which shows that the proportion of young part-time farmers who are willing to farm professionally with an agricultural income of less than 10,000 Yuan CNY (about USD 1400) is 20%. That of 10,000–30,000 Yuan CNY (about USD 1400–4200) is 11.3%, and that of 30,000–50,000 Yuan CNY (about USD 4200–7000) is 1.3%. This shows that among the young part-time farmers willing to farm professionally, there is still a certain proportion of young farmers with an agricultural income below 10,000 Yuan CNY (about USD 1400). The impact of different agricultural production costs on the willingness of young part-time farmers to farm professionally is shown in Table 18. The proportion of young part-time farmers willing to farm professionally with the cost of agricultural production of 4000–5000 Yuan CNY (about USD 560–700) is highest, accounting for 9.7%. The proportion of young part-time farmers who are willing to farm professionally with agricultural production costing below 1000 Yuan CNY (about USD 140) is 9%, 8.7% for 1000–2000 Yuan CNY (about USD 140–280), 1.6% for 2000 to 3000 Yuan CNY (about USD 280–420), and 3.5% for 4000–5000 Yuan CNY (about USD 560–700).

Table 16. The relationship between the willingness of young part-time farmers to farm professionally and the land area contracted by households.

The Willingness of Professional Farming	The Area of Land Contracted by Households (m ² , Proportion of Respondents)						
	0–1000 m ²	1000–2000 m ²	2000–3000 m ²	3000–4000 m ²	4000–5000 m ²	5000–6000 m ²	Above 6000 m ²
No	34 (10.9%)	87 (28.0%)	51 (16.4%)	24 (7.7%)	8 (2.5%)	4 (1.3%)	1 (0.3%)
Yes	10 (3.5%)	15 (4.5%)	27 (8.7%)	13 (4.1%)	12 (3.8%)	19 (6.1%)	5 (1.6%)
							101 (32.6%)

Table 17. The relationship between the willingness of young part-time farmers to farm professionally and agricultural income.

The Willingness of Professional Farming	The Population of Different Agricultural Income Groups (Population, Proportion of Respondents)			
	Less than 10,000 Yuan (CNY)	10,000–30,000 Yuan (CNY)	30,000–50,000 Yuan (CNY)	Total
No	179 (57.7%)	29 (9.4%)	1 (0.3%)	209 (67.4%)
Yes	62 (20%)	35 (11.3%)	4 (1.3%)	101 (32.6%)

Table 18. The relationship between the willingness of young part-time farmers to farm professionally and the cost of agricultural production.

The Willingness of Professional Farming	The Population of Different Agricultural Production Cost Groups (Population, Proportion of Respondents)				
	1000 Yuan (CNY) and Below	1000–2000 Yuan (CNY)	2000–3000 Yuan (CNY)	4000–5000 Yuan (CNY)	Total
No	124 (40%)	22 (7.1%)	36 (11.6%)	17 (5.5%)	10 (3.2%)
Yes	28 (9%)	27 (8.7%)	5 (1.6%)	11 (3.5%)	30 (9.7%)

4.3. Analysis of Regression Results

After five stepwise forward regression iterations of the binary logistic regression model, the change in the parameter estimates is less than 0.001, the model iteration is terminated, and the optimal parameter estimates for the model are derived (Table 19).

Table 19. Binary logistic results of regression analysis on influencing factors of professionalization of young part-time farmers.

Independent Variables	Standard Regression Coefficient	Standard Error	Waldvalue	Sig. Value	Exp(B)
Age(X1)	0.03	0.03	0.86	0.35	1.03
Level of education (X2)	−0.13	0.25	0.28	0.60	0.88
Agricultural policy support (X3)	0.29 **	0.14	4.54	0.03	1.34
Local complex (X4)	0.43 *	0.15	7.98	0.01	1.53
Agricultural industrialization (X5)	0.39 **	0.17	4.97	0.03	1.47
Annual agricultural income (X6)	1.00 *	0.35	8.21	0.00	2.72
Agricultural management risk (X7)	−0.41 **	0.18	5.23	0.02	0.67
Professional identity (X8)	0.11	0.16	0.49	0.48	1.12
Children's education (X9)	−0.31 **	0.15	4.43	0.04	0.73
Urban social security (X10)	0.30	0.26	1.30	0.25	1.35
Urban housing (X11)	−1.06 *	0.38	7.66	0.01	0.35
Urban cost of living (X12)	−0.03	0.23	0.02	0.89	0.97
Non-agricultural income (X13)	−0.59 *	0.19	9.70	0.00	0.56
Dependence on public services (X14)	−0.19	0.17	1.17	0.28	0.83
Urban identity (X15)	−0.30	0.41	0.54	0.46	0.74
Constant term	−2.51	2.06	1.47	0.23	0.08

*, ** represent significance at 1% and 5%, respectively.

The agricultural policy support (X3), local complex (X4), and the level of agricultural industrialization (X5) all pass the significance test, consistent with prior Hypotheses 1(a), 1(b), and 1(c). Among them, agricultural policy support is positively related to the willingness of young part-time farmers to work professionally in agriculture. The satisfaction with agricultural policy is increased by one unit, and the probability of professional farming is increased by 0.34. There is a significant positive correlation between the local complex and the willingness of young part-time farmers to work professionally in agriculture. The level of industrialization is improved by one unit, and the willingness of young farmers to farm professionally is increased by 0.47. The interview can confirm this. Shiwan Town in the Dazu District of Chongqing City is the crib of the Dazu District and the location of the Yuan Longping expert workstation, which has a good foundation in the rice industry and great brand popularity. Some villagers said that rice processing enterprises could reduce investment in agricultural infrastructure, such as rice dryers and related processing equipment and reduce the financial constraints of professional farming.

Agricultural income (X6), the degree of agricultural management risk (X7), and children's education (X9) pass the significance test, consistent with prior Hypotheses 2(a), 2(b), and 2(d). Agricultural income significantly affects young part-time farmers' willingness to farm professionally ($p < 0.05$), and they are positively correlated. It is found from the research that the overall agricultural income level of most young part-time farmers is on the low side, with less than 10,000 Yuan CNY (about USD 1400) accounting for the majority. At present, it is challenging for agricultural operating income to cope with large expenditures and emergencies such as marriage, medical treatment, and children's education, so young farmers have to choose to go out to work. Agricultural management risk has a significant adverse effect on the professional farming of young part-time farmers. The higher the agricultural management risk is, the lower is the willingness of young part-time farmers to participate in professional farming. The survey shows that young part-time farmers with food crops as the main agricultural production types face natural risks. For some cash crops, such as tea trees and fruit trees, young farmers face the risk of fluctuating the value

of agricultural products, and their perception of policy risk is not apparent. Children's education significantly negatively affects the professional farming of young part-time farmers ($p < 0.05$). If the expected level of farmers' children's education is raised by one grade, young farmers' willingness to farm professionally will decrease by 27%. Career identity (X8) fails the significance test, and hypothesis 2(c) does not hold, indicating a significant correlation between young part-time farmers' willingness to professionalize farming and their current and future satisfaction with agriculture.

Only urban housing (X11) in the urban pushing force passes the significance test, and Hypothesis 3(b) holds. Urban housing has a significant reverse influence on the professional farming of young part-time farmers (sig. < 0.05). The willingness of young part-time farmers with affordable housing or self-housing in cities and towns is significantly lower than that of young part-time farmers without stable housing in cities and towns. A possible explanation is that young part-time farmers with stable housing in cities and towns live in cities and towns with "inertia". The urban life security (X10) level fails to pass the significance test, and hypothesis 3(a) does not hold. A possible reason is that the functional mobility of young part-time farmers is relatively large, the expectation of social security level is low, and the consciousness of social security is weak. The cost of living in cities and towns (X12) also fails to pass the significance test, hypothesis 3(c) does not hold, and a possible reason is that compared with the old generation of part-time farmers, young part-time farmers have a stronger enterprising and fighting spirit in employment choice. They regard the cost of living as a secondary decision-making factor.

Only non-agricultural income (X13) passes the significance test, consistent with prior Hypothesis 4(a). If non-agricultural income is increased by one unit, young part-time farmers' willingness to farm professionally will decrease by 0.44. When the non-agricultural income of farmers is higher than agricultural income, it even becomes an alternative source of agricultural income. The decision as a rational economic person will make young part-time farmers invest more time in non-agricultural work. Urban public services (X14) and the identity of urban life (X15) have no significant influence on young part-time farmers' willingness to farm professionally, and hypotheses 4(b) and 4(c) do not hold. A possible explanation is that although young part-time farmers work outside villages, they are not psychologically embedded in the "urban people" group. A sense of identity in the "urban people" group is general. There is no sense of vanity and dependence on the identity of the "urban people".

5. Discussion

The empirical analysis shows that among the previous 13 hypotheses, agricultural policy support, local sentiment, agricultural industrialization, annual agricultural income, and young part-time farmers' willingness to work as professional farmers are positively correlated, which is consistent with the previous Hypotheses 1(a), 1(b), 1(c), and 2(a). The greater the support of agricultural policy, the greater the possibility that young part-time farmers will evolve to be professional farmers; the higher the level of agricultural industrialization, the greater the possibility that young part-time farmers will evolve into professional farmers; the more potent the local sentiment, the higher the likelihood that young part-time farmers will evolve into professional farmers; and the higher the income from agriculture, the higher the likelihood that young part-time farmers will return to their hometowns to become professional farmers. This is similar to the findings of Lin (2018), Valizadeh et al. (2019), and Savari et al. (2022) on the study of factors influencing the motivation of farmers in agricultural production [11,12,79], which all agree on the positive role played by agricultural support policies, farm income, and social network relations, while this paper also verifies the positive facilitating influence of agricultural industrialization on young part-time farmers' willingness to professionalize.

Agricultural business risk, children's education, urban housing, and non-farm income are negatively correlated with young part-time farmers' willingness to engage in professional farming, which is consistent with the prior Hypotheses 2(b), 2(d), 3(b), and 4(a).

The higher the risk of agricultural business, the lower the likelihood that young part-time farmers will return to their hometowns to become professional farmers; the more attention that is paid to children's education, the lower the likelihood that young part-time farmers will return to their hometowns to become professional farmers, young part-time farmers who do not have a stable housing unit in the towns and cities will be more likely to return home to become professional farmers, and the higher the likelihood that young part-time farmers will transform into professional farmers; and the higher the non-farm income, the lower the likelihood that young part-time farmers will return to their hometowns to become professional farmers. In addition, Hypotheses 2(c), 3(a), 3(c), 4(b), and 4c do not hold. This is similar to the findings of Kan and Chen (2022), Li and Huang (2006), and Veeck and Pannell (1989) on the influences of farm-to-urban migration [80–82]. They all agree that non-farm income, housing conditions, and social welfare coverage have a dampening effect on farmers returning home to become professional farmers, and this paper also verifies the dampening effect of agricultural business risk on the willingness of young part-time farmers to professionalize.

To enhance the willingness of young part-time farmers to work in agriculture, we consolidate the key factors that affect the professional farming of young part-time farmers and solve the problems faced by young part-time farmers in professional farming. Based on the four quadrants of the TWPP model, rural pulling force, rural repulsion, urban pushing force, and urban resistance, some actions could be taken to increase rural pulling force, decrease rural repulsion, use urban pushing force, and reduce the comparative advantages of urban repulsion to make rural areas more attractive.

In response to “policy expectations”, the questionnaire set “In what areas do you expect the government to provide policy support before you choose to become a professional farmer?” This multiple-choice question was used to analyze the response rate ratio to the prevalence rate. The statistical results were weighted using the chi-square test of goodness-of-fit, $\chi^2 = 25.52$, $p = 0.00 < 0.05$, indicating a significant difference in the respondents' choices of each option (Table 20). Comparing the number of measured cases and the number of expected cases for each option based on the residual results, the improvement in rural infrastructure, the provision of agricultural technology services, the improvement in agricultural products sales channels, and the introduction of agricultural insurance policies were the main preferences of young part-time farmers.

Table 20. Summary of policy demand response rate and penetration rate.

Policy Support Expected from the Government in What Areas	Responsive		Penetration Rate
	n	Response Rate	
Preferential Policies for Returning to the Countryside to Start a Business	131	14.2%	45.3%
Improve rural infrastructure	144	15.6%	49.8%
Provide agricultural technology services	167	18.1%	57.8%
Improve the sales channels of agricultural products	133	14.4%	46.0%
Introducing agricultural insurance policies	140	15.2%	48.4%
Introducing agricultural enterprises	114	12.4%	39.4%
Improve rural living environment	92	10.0%	31.8%
Aggregation	921	100.0%	318.7%

The goodness-of-fit test: $\chi^2 = 25.52$, $p = 0.00 < 0.05$.

These should be used as crucial policy thrusts to enhance the willingness of young part-time farmers to professionalize their farming, and we make the following recommendations (Table 21).

Table 21. Measures to increase the willingness of young part-time farmers to work in agriculture according to 4 categories of factors.

TWPP Model	Factors Affecting the Validity of Empirical Tests and Hypothesis Matching	Measure
Rural Rally	Agricultural Policy Support	1. Policy publicity and promotion 2. Agricultural technical support and return home business support policy 3. Establishing a medium of communication with farmers to provide solutions
	Industrialization Level	1. Strengthen village infrastructure construction 2. Promote appropriate scale operation 3. Smooth the sales channels of agricultural products
	Native Complex	1. Enhance the happiness of rural life 2. Forming a culture of openness
Rural Repulsion	Agricultural Income	1. Enhance market-oriented business capacity and level 2. Discover local specialty agricultural products 3. Enhance the concept of market cultivation
	The risk level of agricultural business	1. Enhance agricultural insurance service capacity 2. Optimise agricultural insurance operation mechanism 3. Enhancing farmers' ability to assess entrepreneurial risks
	Children's education	1. Expanding resource inputs for rural public service development 2. Adjusting the layout of rural schools 3. Vocational and adult education should be provided in regions with different labor flows.
Town Thrust	No urban housing	Improving rural living conditions.
		1. Satisfying farmers' basic housing needs 2. Improving and upgrading the quality of housing.
Urban Pull	Non-farm income	Increasing the proportion of agricultural income

Firstly, the government should increase the rural pulling force. (1) They should enhance the impact of policy support on the willingness of young part-time farmers to professionalize farming. The government has increased the publicity and promotion of various investment and agricultural policies of the central government, provinces, cities, and counties. The difficulty of agricultural technology limits the reluctance of most young part-time farmers to invest in the business. Thus, the government should build an Internet + information service platform to improve the speed of information dissemination, innovation, and technical services, such as the agricultural bureau of the technical service unit of the promotion and service methods. They should establish a medium of communication with farmers to provide feasible solutions to the problems that young part-time farmers may encounter in the process of their professionalization, such as land transfer, capital demand, technology supply, hiring and talent demand, social services, rural public infrastructure supply, and social security, and create a favorable atmosphere for the professionalization of farmers. (2) They should enhance the level of agricultural industrialization. The soundness of rural infrastructure and the perfection of agricultural product sales channels are critical for rural industrialization. The scale of investment in public infrastructure must be increased. They should accelerate the construction of information infrastructure such as communications and networks; basic agricultural facilities such as rural road transport, water supply security, and high-standard bare farmland; and primary service facilities such as cold storage and warehousing and cold chain distribution service sites. Continuing to promote moderate-scale operation, advancing agriculture from yield-oriented to quality-oriented, and accelerating the construction of a modern agricultural

industrial system, production system, and business system will vigorously promote the revitalization of rural industries. Smooth sales channels for agricultural products encourage in-depth cooperation between farmers and family farms, and leading enterprises and cooperatives, and also adopt the order + dividend, direct investment, and shareholding methods to achieve greater cooperation. The approaches of order + dividend, direct investment, and shareholding operation are used to achieve a greater degree of interest linkage and complementarity of advantages; to drive young part-time farmers to join the middle and lower reaches of processing, circulation, and retailing; and to share the proceeds of the processing and sales process. (3) The local community needs to improve the ecological environment of rural living and build a livable, workable, and beautiful countryside to enhance farmers' sense of well-being and belonging. They need to establish the cooperative economy and associated organizations in the rural areas to form an open culture; to increase the atmosphere of rendering the countryside by holding agricultural product exhibitions and sales fairs, harvest festivals, and other special agricultural activities in the rural areas; and to publicize the typical representatives of the new vocational farmers, etc., so that the rural culture, while inheriting the essence of the farming culture of diligence, economy, mutual assistance, and love of family, also absorbs the concepts of respect for business, law-abidingness, innovation, and competition of the modern commercial society. The rural culture will inherit the essence of farming culture, such as hard work, saving, mutual help, and love of family, and at the same time absorb the concepts of respect for business, law-abiding, innovation, and competition of modern commercial society.

Secondly, they should decrease rural repulsion. (1) They should increase the income of smallholder agricultural operations and enhance the capacity and level of market-oriented operation. The government can encourage the leading of agricultural industrialization enterprises to drive small farmers to develop specialized, standardized, large-scale, and intensive production by signing purchase and sales contracts for agricultural products with small farmers, family farms, and farmers' cooperatives and building standardized and large-scale raw material production bases. They should discover local specialty agricultural products, form production scale advantages, and increase the added value of agricultural products. They should enhance the concept of market cultivation; break the scope of market interaction bounded by families, clans, villages, and towns; and provide channels and create conditions for young part-time farmers to "go out". (2) Agricultural insurance policies are a common way to reduce agricultural business risks. The evolution of young part-time farmers into professional farmers requires a larger scale of operation and a higher degree of market participation, and the government should enhance the capacity of agricultural insurance services, set up an agricultural risk fund, and provide more price insurance and the whole process of risk management services before and after insurance. They should optimize the operation mechanism of agricultural insurance, encourage localities to carry out insurance for agricultural products with particular characteristics and advantages according to local conditions, and establish a division of labor and a linkage mechanism to achieve refined risk management and control. They should enhance farmers' ability to assess entrepreneurial risks and reduce the perception of high risk arising from the deficiencies in farmers' perception of professionalism to improve farmers' sense of professional self-efficacy. (3) The level of rural public services should be improved. The government should expand the investment of resources to develop rural public services, break down the institutional obstacles to developing rural public services, integrate the philosophy of sharing development into rural development, and reform the top-down supply mechanism to improve the basic public service system for all. They are adjusting the layout of schools in conjunction with the return of entrepreneurs to their hometowns in a big way, planning the layout of schools by the size of the population and the trend of transfers rather than according to the administrative structure. In regions with different labor flows, there should be distinctive vocational and adult education, and a mechanism for classified training should be established based on the abilities and strengths of young part-time farmers.

Thirdly, they should consider the urban pushing force and repulsion, highlighting the comparative advantages of rural areas. (1) They should improve rural living conditions. It is challenging for urban housing demand to meet the formation of an urban pushing force. The policy direction is not to increase the threshold of urban housing purchase but to increase rural housing security and modernization, improving rural living conditions. On the one hand, this aims to meet the basic housing needs of farmers, achieve the function of housing security, encourage the collation of rural settlement land, revitalize the stock of construction land, and implement standardized centralized housing construction. To encourage the sorting out of the land in rural settlements and the revitalization of the stock of construction land, standardized centralized housing construction needs to be implemented for households unable to meet their basic housing needs. On the other hand, the aims are the improvement and upgrade in the quality of housing, unified planning, house building drawings, the disposal of waste hollow houses, dangerous house reconstruction, the unified transformation of the external wall facade, the strengthening of the surrounding environment's clean-up, and the improvement in the residential supporting facilities. (2) They should increase the proportion of agricultural income in total income. To avoid the alternative result of non-agricultural income being higher than agricultural income, the government needs to increase the proportion of agricultural income, enhance the industrial base of villages, and drive farmers to increase their income through industrialization. The measures to increase agricultural income discussed in the previous section also apply.

6. Conclusions

Based on the results of binary logistic regression analysis, the main factors affecting the willingness of young part-time farmers to engage in farming professionally are agricultural policy support, local sentiment, industrialization level, agricultural income, agricultural business risk, children's education, and urban housing. A comprehensive analysis of the multiple responses to the survey of young part-time farmers' "policy expectations" clarifies the focus and direction of improving young part-time farmers' willingness to engage in farming professionally. Policies for young part-time farmers require not only "hard services" such as rural infrastructure and housing modernization, but also "soft support" in terms of the business environment, agricultural insurance policies, agricultural technical support, agricultural product sales channels, and education provision. The most important thing is to improve agricultural income based on large-scale operations. Most importantly, it is based on large-scale management to increase agricultural income and the willingness to farm professionally, as well as the national strategy of building a harmonious and beautiful countryside as a guide to increase the sense of happiness in rural life.

However, our study still has some limitations. Although we tried to cover as many villages as possible with different industries, population flows, and levels of development and geography, a sample of 310 respondents is not many, classified as a purposeful selection, as particular circumstances largely dictated it.

China's rural revitalization strategy has set up a good development platform for the professional development of vocational farmers, which objectively requires the professional development of vocational farmers. The interactive and intersectional relationship between the two needs to be further researched. The dynamic development of rural revitalization needs to be incorporated into the influencing factors of the professional development of vocational farmers. In the past decade, China has promoted the cultivation of new professional farmers, and the effect of its contribution to the professionalization of farmers, how to promote the professionalization of farmers through supportive policies such as land policy and industrial policy after training, and how to guarantee the stability of professional farmers need to be further researched.

Author Contributions: Conceptualization, L.Y. and A.Z.; methodology, L.Y. and Y.G.; formal analysis, L.Y.; investigation, L.Y.; writing—original draft preparation, L.Y. and Y.G.; writing—review and editing, A.Z.; visualization, Y.G.; funding acquisition, L.Y. All authors have read and agreed to the published version of the manuscript.

Funding: Supported by the Fundamental Research Funds for the Central Universities (2022SKWF07).

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

Conflicts of Interest: The authors declare no conflict of interest.

References

1. National Bureau of Statistics. *National Report on Migrant Worker Monitoring and Survey 2019*; National Bureau of Statistics: Beijing, China, 2020. (In Chinese)
2. Wang, X. Release word of 2020 China National High-Quality Farmers Development Report. *Farmer Technol. Train.* **2021**, *3*, 17–19. (In Chinese)
3. He, Y.; Zang, L.; Luo, E.; Wang, X. The Impact of Part-Time Employment on the Grain-Growing Decisions of Smallholder Farmers in the Main Grain-Producing Areas of China Based on the Mediating Effect of Agricultural Production Services. *Sustainability* **2023**, *15*, 369. [\[CrossRef\]](#)
4. Lu, Y.; Chen, M.; Weng, Z. Drivers of the peasant households' part-time farming behavior in China. *J. Rural Stud.* **2022**, *93*, 112–121. [\[CrossRef\]](#)
5. Yang, X.; Sang, Y.M. How Does Part-Time Farming Affect Farmers' Adoption of Conservation Agriculture in Jiangnan Plain, China? *Int. J. Environ. Res. Public Health* **2020**, *17*, 5983. [\[CrossRef\]](#) [\[PubMed\]](#)
6. Gao, F.; Jun, C.H. Chinese Farmers Part-time Work and Its Impact on their Willingness of Scale Management of Farmland. *J. Sinol. China Stud.* **2022**, *90*, 139–160.
7. Ge, D.D.; Kang, X.L.; Liang, X.; Xie, F.T. The Impact of Rural Households' Part-Time Farming on Grain Output: Promotion or Inhibition? *Agriculture* **2023**, *13*, 671. [\[CrossRef\]](#)
8. Xu, N.; Zhang, L.Q.; Leng, X.Y. Sustainable Food Production from a Labor Supply Perspective: Policies and Implications. *Sustainability* **2022**, *14*, 15935. [\[CrossRef\]](#)
9. Bin, G.; He, D.L. Analysis on part-time farmers' welfare changes before and after rural land transfer. *Int. J. Electr. Eng. Educ.* **2020**. [\[CrossRef\]](#)
10. Valizadeh, N.; Bijani, M.; Hayati, D.; Fallah Haghighi, N. Social-cognitive conceptualization of Iranian farmers' water conservation behavior. *Hydrogeol. J.* **2019**, *27*, 1131–1142. [\[CrossRef\]](#)
11. Savari, M.; Yazdanpanah, M.; Rouzaneh, D. Factors affecting the implementation of soil conservation practices among Iranian farmers. *Sci. Rep.* **2022**, *12*, 8396. [\[CrossRef\]](#)
12. Lockie, S. Networks of agri-environmental action: Temporality, spatiality and identity in agricultural environments. *Sociol. Rural.* **2006**, *46*, 22–39. [\[CrossRef\]](#)
13. Coughenour, C.M. Innovating conservation agriculture: The case of no-till cropping. *Rural. Sociol.* **2003**, *68*, 278–304. [\[CrossRef\]](#)
14. Sharifzadeh, M.; Zamani, G.H.; Khalili, D.; Karami, E. Agricultural Climate Information Use: An Application of the Planned Behaviour Theory. *J. Agric. Sci. Technol.* **2012**, *14*, 479–492.
15. Magesa, M.M.; Mkasanga, N.N. Smallholder farmers' willingness to pay for access to agricultural market information in Tanzania. *Agrekon* **2021**, *60*, 424–444. [\[CrossRef\]](#)
16. Zhang, R.X.; Luo, L.; Liu, Y.Y.; Fu, X.H. Impact of Labor Migration on Chemical Fertilizer Application of Citrus Growers: Empirical Evidence from China. *Sustainability* **2022**, *14*, 7526. [\[CrossRef\]](#)
17. Tran, T.A. Land use change driven out-migration: Evidence from three flood-prone communities in the Vietnamese Mekong Delta. *Land Use Policy* **2019**, *88*, 104157. [\[CrossRef\]](#)
18. Radel, C.; Schmook, B.; Mcevoy, J.; Mendez, C.; Petrzela, P. Labour Migration and Gendered Agricultural Relations: The Feminization of Agriculture in the Ejidal Sector of Calakmul, Mexico. *J. Agrar. Chang.* **2012**, *12*, 98–119. [\[CrossRef\]](#)
19. Moon, B. Paradigms in migration research: Exploring "moorings" as a schema. *Prog. Hum. Geogr.* **1995**, *19*, 504–524. [\[CrossRef\]](#)
20. Brown, L.D. Introduction to a decade of transition. *J. Health Politics Policy Law* **1986**, *11*, 569–583. [\[CrossRef\]](#)
21. Fitzgerald, J.; Leblang, D.; Teets, J.C. Defying the Law of Gravity the Political Economy of International Migration. *World Politics* **2014**, *66*, 406–445. [\[CrossRef\]](#)
22. Hunter, L.M.; Luna, J.K.; Norton, R.M. Environmental Dimensions of Migration. *Annu. Rev. Sociol.* **2015**, *41*, 377–397. [\[CrossRef\]](#) [\[PubMed\]](#)
23. Lee, E.S. A theory of migration. *Demography* **1966**, *1*, 47–57. [\[CrossRef\]](#)
24. Rabe, B.; Taylor, M.P. Differences in Opportunities? Wage, Employment and House-Price Effects on Migration. *Oxf. Bull. Econ. Stat.* **2012**, *74*, 831–855. [\[CrossRef\]](#)
25. Bogue, D.J. A migrants-eye view of the cost and benefits of migration to a metropolis. In *Internal Migration: A Comparative Perspective*; Academic Press: Cambridge, MA, USA, 1977; pp. 167–182.
26. Cohen, L.; Duberley, J.; Ravishankar, M.N. Examining the Interplay of Career, Migration and National Cultural Identity: The Case of Indian Scientists. *Int. Migr.* **2015**, *53*, 104–121. [\[CrossRef\]](#)
27. Keaveney, S.M. Customer Switching Behavior in Service Industries: An Exploratory Study. *J. Mark.* **1995**, *59*, 71–82. [\[CrossRef\]](#)

28. Doerschler, P. Push-pull factors and immigrant political integration in Germany. *Soc. Sci. Q.* **2006**, *87*, 1100–1116. [\[CrossRef\]](#)
29. Szymanska-Matusiewicz, G. Migration and cultural flows between Vietnam and Poland. *Asian Pac. Migr. J.* **2016**, *25*, 275–295. [\[CrossRef\]](#)
30. Sander, W. Educational attainment and residential location. *Educ. Urban Soc.* **2006**, *38*, 307–326. [\[CrossRef\]](#)
31. Garnier, D.; Simondon, K.B.; Hoarau, T.; Benefice, E. Impact of the health and living conditions of migrant and non-migrant Senegalese adolescent girls on their nutritional status and growth. *Public Health Nutr.* **2003**, *6*, 535–547. [\[CrossRef\]](#)
32. Ghafoor, N.; Mehr-Un-Nisa; Akbar, M.R. Socioeconomic Determinants of Migration in the City of Lahore, Pakistan. *J. Knowl. Econ.* **2022**, *13*, 3029–3049. [\[CrossRef\]](#)
33. Patel, A.; Joseph, G.; Killemsetty, N.; Eng, S. Effects of residential mobility and migration on standards of living in Dar es Salaam, Tanzania: A life-course approach. *PLoS ONE* **2020**, *15*, e0239735. [\[CrossRef\]](#) [\[PubMed\]](#)
34. Williams, C.J. In defence of materialism: A critique of Afrocentric ontology. *Race Cl.* **2005**, *47*, 35–48. [\[CrossRef\]](#)
35. Cimpoeru, S. Macro-Economic Determinants of Migration. A Comparative Analysis for Old vs. New European Member States. *Econ. Comput Econ. Cyb.* **2020**, *54*, 5–22. [\[CrossRef\]](#)
36. Bin, W.; Robinson, B.; Chen, A.J.; Li, P.F. Seafarer Training and Rural Development in China: A Survey Report. *China Int. J.* **2014**, *12*, 131–143.
37. Ram, S. A case for internal migration policy in India. *Popul. Geogr.* **1993**, *15*, 65–71.
38. Fussell, E.; Hunter, L.M.; Gray, C.L. Measuring the environmental dimensions of human migration: The demographer's toolkit. *Global Environ. Chang.* **2014**, *28*, 182–191. [\[CrossRef\]](#)
39. Hamilton, L.C.; Colocousis, C.R.; Johansen, S.T.F. Migration from resource depletion: The case of the Faroe Islands. *Soc. Nat. Resour.* **2004**, *17*, 443–453. [\[CrossRef\]](#)
40. Peraica, M.; Rasic, D. The Impact of Mycotoxicoses on Human History. *Arch. Ind. Hyg. Toxicol.* **2012**, *63*, 513–518. [\[CrossRef\]](#)
41. Bansal, H.S.; Taylor, S.F.; James, Y.S. “Migrating” to new service providers: Toward a unifying framework of consumers' switching behaviors. *J. Acad. Mark. Sci.* **2005**, *33*, 96–115. [\[CrossRef\]](#)
42. McMichael, C. Climate change-related migration and infectious disease. *Virulence* **2015**, *6*, 544–549. [\[CrossRef\]](#)
43. Jonczyk, R.; Sleszynski, P.; Dolinska, A.; Ptak, M.; Rokitowska-Malcher, J.; Rokita-Poskart, D. Environmental and Economic Factors of Migration from Urban to Rural Areas: Evidence from Poland. *Energies* **2021**, *14*, 8467. [\[CrossRef\]](#)
44. Dustmann, C.; Preston, I.P. Racial and economic factors in attitudes to immigration. *BE J. Econ. Anal. Policy* **2007**, *7*, 41. [\[CrossRef\]](#)
45. Redmond, M.; Martin, B. All in the (Definition of) Family: Transnational Parent-Child Relationships, Rights to Family Life, and Canadian Immigration Law. *J. Fam. Issues* **2023**, *44*, 766–784. [\[CrossRef\]](#)
46. Bernhard, J.K.; Landolt, P.; Goldring, L. Transnationalizing Families: Canadian Immigration Policy and the Spatial Fragmentation of Care-giving among Latin American Newcomers. *Int. Migr.* **2009**, *47*, 3–31. [\[CrossRef\]](#)
47. Sravanth, K.R.S.; Sundaram, N. Analysis of socioeconomic status of young migrant farmers in India using probit regression. *Econ. Res. -Ekon. Istraživanja* **2023**, *36*, 2106267. [\[CrossRef\]](#)
48. Von Braun, J. Agricultural economics and distributional effects. *Agric. Econ.* **2005**, *32*, 1–20. [\[CrossRef\]](#)
49. Mejias, P.; Varela-Ortega, C.; Flichman, G. Integrating agricultural policies and water policies under water supply and climate uncertainty. *Water Resour. Res.* **2004**, *40*, 8. [\[CrossRef\]](#)
50. Retter, C.; Stahr, K.; Boland, H. The task of farmers in village communication networks. *Berichte Uber Landwirtschaft.* **2002**, *80*, 446–467.
51. Parquet, M.; Le Coq, J.F. Settling of young farmers and pluriactivity in Costa Rica. *Cah. Agric.* **2017**, *26*, 15004. [\[CrossRef\]](#)
52. Branca, G.; Arslan, A.; Paolantonio, A.; Grewer, U.; Cattaneo, A.; Cavatassi, R.; Lipper, L.; Hillier, J.; Vetter, S. Assessing the economic and mitigation benefits of climate-smart agriculture and its implications for political economy: A case study in Southern Africa. *J. Clean. Prod.* **2021**, *285*, 125161. [\[CrossRef\]](#)
53. Xu, J.F.; Liao, P. Crop Insurance, Premium Subsidy and Agricultural Output. *J. Integr. Agr.* **2014**, *13*, 2537–2545. [\[CrossRef\]](#)
54. Girdziute, L.; Besuspariene, E.; Nausediene, A.; Novikova, A.; Leppala, J.; Jakob, M. Youth's (Un)willingness to work in agriculture sector. *Front. Public Health* **2022**, *10*, 11. [\[CrossRef\]](#)
55. Plana-Farran, M.; Arzubia, U.; Blanch, A. Successors' Future Training in Family Farms: The Impact of Intrinsic and Extrinsic Factors. *J. Knowl. Econ.* **2022**, *22*, 1–22. [\[CrossRef\]](#)
56. Izzati, I.; Rabun, M.; Nopiah, A. Are you inclined into agribusiness? Perspectives from Graduating Students. *J. Int. Bus. Econ. Entrep.* **2020**, *5*, 30. [\[CrossRef\]](#)
57. Linan, F.; Rodriguez-Cohard, J.C.; Rueda-Cantuche, J.M. Factors affecting entrepreneurial intention levels: A role for education. *Int. Entrep. Manag. J.* **2011**, *7*, 195–218. [\[CrossRef\]](#)
58. Salam, M.A.; Noguchi, T.; Alim, M.A. Factors affecting participating farmers' willingness-to-pay for the Tree Farming Fund: A study in a participatory forest in Bangladesh. *Environ. Monit. Assess.* **2006**, *118*, 165–178. [\[CrossRef\]](#) [\[PubMed\]](#)
59. Brooks, R.; Waters, J. A Second Chance at ‘Success’: UK Students and Global Circuits of Higher Education. *Sociology* **2009**, *43*, 1085–1102. [\[CrossRef\]](#)
60. Findlay, A.M. An Assessment of Supply and Demand-side Theorizations of International Student Mobility. *Int. Migr.* **2011**, *49*, 162–190. [\[CrossRef\]](#)
61. Mosca, I.; Wright, R.E. National and international graduate migration flows. *Popul. Trends* **2010**, *141*, 36–53. [\[CrossRef\]](#)
62. Raghuram, P. Theorising the Spaces of Student Migration. *Popul. Space Place* **2013**, *19*, 138–154. [\[CrossRef\]](#)

63. Rusbult, C.E.; Van Lange, P.A.M. Interdependence, interaction, and relationships. *Annu. Rev. Psychol.* **2003**, *54*, 351–375. [\[CrossRef\]](#)
64. Gerpott, F.H.; Balliet, D.; Columbus, S.; Molho, C.; de Vries, R.E. How Do People Think About Interdependence? A Multi-dimensional Model of Subjective Outcome Interdependence. *J. Pers. Soc. Psychol.* **2018**, *115*, 716–742. [\[CrossRef\]](#)
65. Yang, F.; Jiang, Y.; Paudel, K.P. Impact of Work Value Awareness on Self-Rated Physical Health of Rural-to-Urban Migrant Workers in China. *Healthcare* **2021**, *9*, 505. [\[CrossRef\]](#)
66. Peng, C.H.; Wang, J.S.H. Accommodating China's Floating Population: Local Variations and Determinants of Housing Policies for Rural Migrant Workers. *China Q.* **2023**, *253*, 158–182. [\[CrossRef\]](#)
67. Collinson, M.A.; White, M.J.; Ginsburg, C.; Gomez-Olive, F.X.; Kahn, K.; Tollman, S. Youth migration, livelihood prospects and demographic dividend: A comparison of the Census 2011 and Agincourt Health and Demographic Surveillance System in the rural northeast of South Africa. *Afr. Popul. Stud.* **2016**, *30*, 2629–2639. [\[CrossRef\]](#) [\[PubMed\]](#)
68. Borjas, G.J. Immigrant skills and ethnic spillovers. *J. Popul. Econ.* **1994**, *7*, 99–118. [\[CrossRef\]](#)
69. Song, H.S.; Thisse, J.F.; Zhu, X.W. Urbanization and/or rural industrialization in China. *Reg. Sci. Urban Econ.* **2012**, *42*, 126–134. [\[CrossRef\]](#)
70. Lopez, M.P. The rural population. The great change toward urbanization. *Demos* **1989**, *2*, 15–16.
71. Lewis, W.A. *Economic Development with Unlimited Supplies of Labour*; John Wiley & Sons: Hoboken, NJ, USA, 1954; Volume 22, pp. 139–191.
72. Harris, J.R.T. Migration, Unemployment & Development: A Two-Sector Analysis. *Am. Econ. Rev.* **1970**, *60*, 126–142.
73. Zhang, L.; Xie, L.Y.; Zheng, X.Y. Across a few prohibitive miles: The impact of the Anti-Poverty Relocation Program in China. *J. Dev. Econ.* **2023**, *160*, 102945. [\[CrossRef\]](#)
74. Milan, A.; Ho, R. Livelihood and migration patterns at different altitudes in the Central Highlands of Peru. *Clim. Dev.* **2014**, *6*, 69–76. [\[CrossRef\]](#)
75. Sonneveld, B.; Keyzer, M.A. Land under pressure: Soil conservation concerns and opportunities for Ethiopia. *Land Degrad. Dev.* **2003**, *14*, 5–23. [\[CrossRef\]](#)
76. Guang, L.; Zheng, L. Migration as the second-best option: Local power and off-farm employment. *China Q.* **2005**, *181*, 22–45. [\[CrossRef\]](#)
77. Hinna, A.; Homberg, F.; Scarozza, D.; Verdini, V. Public service motivation and public sector employment preference: Comparing Italian and British students. *Public Money Manag.* **2021**, *41*, 46–54. [\[CrossRef\]](#)
78. Li, Y.W.; Qiu, S. More “Government”, less “Governance”: Chinese public employees’ preferences for governing public service delivery. *Policy Stud.* **2022**, *43*, 422–442. [\[CrossRef\]](#)
79. Lin, N. Environmental Research on the Influencing Factors of Skill Training Willingness of the New Era Professional Farmers in the Central Region of China. *Ekoloji* **2018**, *27*, 1327–1336.
80. Li, S.-M.; Huang, Y. Urban Housing in China: Market Transition, Housing Mobility and Neighbourhood Change. *Hous. Stud.* **2006**, *21*, 613–623. [\[CrossRef\]](#)
81. Kan, K.; Chen, J. Rural Urbanization in China: Administrative Restructuring and the Livelihoods of Urbanized Rural Residents. *J. Contemp. China* **2022**, *31*, 626–643. [\[CrossRef\]](#)
82. Veeck, G.; Pannell, C.W. Rural Economic Restructuring and Farm Household Income in Jiangsu, People's Republic of China. *Ann. Assoc. Am. Geogr.* **1989**, *79*, 275–292. [\[CrossRef\]](#)

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.