Article

Are Villagers Willing to Enter the Rural Collective Construction Land Market under the Arrangement of Transaction Rules?—Evidence from Ezhou, China

Meie Deng 1*, Anlu Zhang 2,*, Congxi Cheng 1 and Canwei Hu 1

1 School of Management, Wuhan Polytechnic University, Wuhan 430048, China; dengmeie0024@163.com (M.D.); grahamcheng@sina.com.cn (C.C.); hb7112@126.com (C.H.)
2 College of Land Management, Huazhong Agricultural University, Wuhan 430070, China
* Correspondence: zhanganlu@mail.hzau.edu.cn; Tel.: +86-1399-558-1694

Abstract: In China, rural construction land refers to the construction land of townships (town) and villages. The construction land of towns (town) and villages refers to the land used by township (town) and village collective economic organizations and rural individuals to invest or raise funds for various non-agricultural construction. Rural collective construction land is divided into three categories: homestead, land for public welfare public facilities, and land for business. Complete market transaction rules can make the market of rural collective construction land run more openly, fairly, and justly, thus protecting the rights of villagers and collective economic organizations and, at the same time, reducing the transaction cost of the village collective. In this paper, we choose the formal rules of the urban and rural land linking quota trading market in Ezhou, Hubei Province, China, to analyze the three dimensions of the market transaction rules and villagers’ willingness. We also provide suggestions for the development of the RCCL market and the improvement of trading rules. The research results of the logistic model show the following: (1) Under the arrangement of the transaction rules of the RCCL, there are high transaction costs, especially labor costs and time costs, so the villagers’ willingness to enter the market is not very strong. (2) Asset specificity affects villagers’ willingness. The larger the area of RCCL involved in the transaction, the higher the transaction cost, the lower the villagers’ willingness to support the RCCL transfer. (3) The greater the uncertainty of the RCCL transaction environment—mainly due to the problems of the openness, equity, and justice of the transaction rules, which lies in the transaction information not being transparent and the income distribution and the pricing being unreasonable, resulting in villagers’ rights being denied—the more the villagers are unwilling to support the RCCL entering the market. Therefore, we suggest that more open, fair, and just trading rules of the RCCL market should be formulated to protect the security of villagers’ property rights. Moreover, the land value should be displayed reasonably, which can also standardize the good trading order and trading environment, thus making the market development more effective and stable. Our work provides some insights for improving the efficiency of the land market, which will contribute to the development of the worldwide RCCL market.

Keywords: rural collective construction land (RCCL); asset specificity; transaction uncertainty; transaction costs; transaction rules

1. Introduction

With the marketization of urban land and expansion, using the rights value and asset value of rural collective construction land is becoming more important [1,2]. The local governments take private and implicit land transfers, but implicit transfer leads to the deprivation of farmers’ interests. Therefore, the government began to select land for a transfer pilot in 1999 [3,4], proposed to give RCCL lease rights and equity participation, and to clarify ways to enter the market [5]. In the government’s top-down institutional arrangement, the most important is the impact of trading rules on the uncertainty of
the market environment [6–9]. The RCCL market formulates market transaction rules, which protect the interests of the collective landowners and the security of the transaction, reduce the uncertainty of the transaction, and improve transaction efficiency [10–13]. In an RCCL transfer, the government should provide an institutional guarantee for the collective non-agricultural construction land market and strictly standardize transfer behavior (i.e., land-use planning and control) to maximize farmer and government social benefits [14–16]. Although farmers account for a large proportion, they are in a weaker party, and their interests are often ignored. As the owners of the RCCL, villagers can freely choose the demand of the RCCL market, and both parties confirm the transfer price and mode through price negotiation. In this process, every farmer has the opportunity to participate in RCCL market transactions [17].

Due to the inconsistent level of economic development across the country, the cultures, customs, and moral constraints in the pilot are also different. The trial measures for the administration of the RCCL in Hubei standardize the scope of application, restrictive conditions, and procedures for transfer and lease [18]; Ezhou’s rural comprehensive property rights system reform was officially established in September 2012 [18]. It looked at whether the formulation of the transfer plan of the RCCL had listened to the opinions of most villagers and whether the villagers voluntarily agree to the land transfer. As for whether the transfer income distribution and the price are reasonable in the process of RCCL transfer, according to the regulations, the land transfer price is 160,000 yuan/mu [19,20]. According to the land development right, 160,000 yuan/mu is too low, the land price is unreasonable, so the land income distribution enjoyed by farmers is little. The RCCL transfer is not open, fair, and just, the rights and interests of farmers cannot be protected, the market efficiency is very low, and the development of the RCCL market is slow.

The RCCL linking quota has established an index trading system, including rights confirmation registration, a trading platform, a basic land price system, etc. The RCCL linking quota trading policy document mainly specifies the transfer conditions, transaction methods, transaction procedures, benchmark land price, and income distribution. This paper analyzes villagers’ willingness in the three dimensions (openness, fairness, and justice) of transaction rules. Regarding the openness of the RCCL transaction rules, it includes symmetry information of the RCCL, bidding patterns, etc. Without enough information disclosure, villagers cannot protect their own interests, and the value of the land cannot be reasonably manifested, which will lead to loss of RCCL transactions. The equity of the RCCL transaction rules [21] consists of income distribution and supervision. The explicit provisions of the income distribution can protect the rights and interests of villagers and avoid the government depriving villagers of their interests. Market supervision, including online, offline, and social media, can achieve equal transactions. Regarding justice of the RCCL transaction rules, it is composed of urban-rural construction, land increase-decrease, linking quota price, and service charge. The pricing lacks an official base price stipulated by the government, so the transaction faces uncertainty. To charge service fees will increase the cost.

All of the above-mentioned attributes (openness, equity, and justice) highly influence villager willingness. This paper will construct a theoretical framework of relationships between three attributes of transaction rules and villagers’ willingness, based on Williamson’s transaction cost theory, and take the RCCL market in the Ezhou district as an example. The research will enrich the literature in this field and empirically provide an experience for China’s unified rural-urban land market development and transition countries.

The main focus of this paper is structured as follows: Section 2 proposes the theoretical framework and hypotheses of the three dimensions (openness, fairness, and justice) of the market transaction rules and the villagers’ willingness. Section 3 introduces the RCCL market in the Ezhou District as a case study, along with the data collection and methodology. Section 4 discusses empirical results. Section 5 discusses the impact of the three dimensions of transaction rules (openness, fairness, and justice) on villagers’ willingness and policy implications.
2. Theoretical Framework and Hypotheses

2.1. Theoretical Framework

As shown in Figure 1, villagers and rural economic organizations can obtain value-added land income from the transparent and open unified urban and rural construction land market [22–24]. This is favorable over a low amount of land acquisition compensation or gray income in the implicit land market without legal protection. Under informal rules, farmers’ land rights and interests cannot be protected. In order to standardize the use of land, the Ezhou successively issued Interim Measures for the management of the Ezhou urban-rural land linking quota trading in 2012. Under the supervision of the local government, the construction of the Ezhou land quota trading system was promoted, and a unique Ezhou land linking quota trading mode was formed. Ezhou is a pilot study of urban-rural integration and a demonstration point of comprehensive reform in Hubei Province [25–27]. The establishment of trading rules reduces the uncertainty of the RCCL trading environment, and the market becomes more open, fair, and just. Therefore, the imperfection of market transaction rules, such as land price formation, income distribution, and market supervision, leads to the high cost of market transactions.

Figure 1. The theoretical framework.

The transaction rules are better, the transaction cost of the collective economic organizations and villagers will be smaller, and villagers will actively support the RCCL in the market. On the contrary, the transaction cost will be larger, so the villagers will be more reluctant to participate in the RCCL market [28,29]. Rural collective construction land is in the pilot stage, and the transaction rules are not perfect, so the degree of transaction uncertainty (openness, fairness, and justice) is not enough [30–32]. The stronger the uncertainty of transaction rules, the more serious the opportunistic behavior and corruption, and the higher the transaction costs affecting villagers and the collective economic organizations’ willingness. If the transaction rules are more open, fair, and just, the transaction uncertainty is decreased, the transaction cost is lower, and villager interests are protected.

2.2. Hypotheses

According to Williamson’s transaction cost theory, the transaction cost of the RCCL market can be characterized with three key characteristics: (1) uncertainty, (2) the frequency of transactions, and (3) the degree of transaction-specific investments. The specificity of human capital refers to the nature that the value of human capital for a specific purpose is higher than that for any other purpose [33–35]. The specificity of human capital in the linking quota trading of the RCCL mainly includes the education level of the personnel of the village collective economic organization who organizes the transaction and negotiation, whether they master specific professional skills, and the number of leaders and representatives of the village collective economic organization in the transaction.
The stronger the specificity of human capital, the higher the transaction cost \cite{36,37}. The specificity of physical assets refers to the land transaction area. The larger the land transaction area, the stronger the specialization of physical assets and the higher the transaction cost. The specificity of geographical location is mainly affected by the regional location of the RCCL. The stronger the specificity of the geographical location, the higher the transaction cost. The more complicated the transaction procedures under the transaction rules, the higher the human, material, and time costs invested in the transaction, and the more reluctant the villagers are to participate in the RCCL market.

**Hypothesis 1 (H1).** *Under the arrangement of transaction rules, the higher the transaction cost, the more reluctant the villagers are to participate in the RCCL transfer.*

At present, the regulations on the transaction process of rural-urban land linking quota trading in the Ezhou relate to the following: transaction voting by farmers, government approval, information disclosure, transaction, and linking quota trading registration. The transaction rules of RCCL linking quota trading mainly provide relevant provisions on the release of indicator information, the organization of transaction procedures, the charge fees, and the supervision. The more open, fair, and just the trading rules, the higher the market transparency and the less likely there is collusion, corruption, and speculation between the government, demander, and village collective economic organizations. The degree of information disclosure of transaction indicators, transaction results, and transaction methods will affect the transaction cost of the supplier (collective economic organization). The transaction information is publicized on multiple network information platforms, which can save the transaction cost better than that publicized on the bulletin board of the village. The transaction rules clearly stipulate the proportion of income distribution between the government, collective economic organizations, and farmers. The more flexible the transaction supervision methods and channels are, the fairer the transaction will be, and the less villager interests are lost. The price is directly related to the interests of villagers. The amount of fees is directly related to the transaction cost. The three attributes of openness, fairness, and justice of transactions seriously affect the villagers’ willingness.

**Hypothesis 2 (H2).** *The higher the openness, fairness, and justice of the transaction rules of the RCCL market, the more the villagers’ interests are protected, so they are willing to actively participate in the RCCL transfer.*

### 3. Study Area, Data, and Methodology

#### 3.1. Study Area

Ezhou City (114°32′−115°05′ E, 30°00′−30°06′ N) is in the east of Hubei Province on the south bank of the middle reaches of the Yangtze River (Figure 2). Ezhou has successively issued the Interim Measures to manage urban-rural land quota trading, promoted and strengthened the construction of the Ezhou land quota trading system, and formed a unique Ezhou construction land transaction mode. As a pilot of urban-rural integration development and a comprehensive reform demonstration point in Hubei Province, Ezhou was listed as the grass-roots reform contact point by the Ministry of Land and Resources in 2012. Based on the experience of rural property rights system reform in Chengdu and Chongqing, Ezhou’s rural comprehensive property rights system reform was officially established in September 2012. Ezhou mainly implements the system of rural-urban linking quota trading. By implementing land remediation projects, the construction land in the old area is reclaimed into cultivated land. After deducting the land occupied by farmers’ concentrated residential areas, the construction land quota can enter the property rights trading platform for transactions at the price of 160,000 yuan/mu.
3.2. Data Collection

We conducted an empirical study based on the data collected from 5 villages in Ezhou, Hubei, in 2020. The villages include Xinmiao, Yanji, Dushan, Zelin, and Putuan. The survey respondents were village collective leaders and villagers. In order to test the hypotheses, we designed the questionnaire with the following five sections. The first part was related to the basic information of the respondents, such as education level and specific professional skills, etc. The second part was the costs of the village collective economic organization under the rules of transaction. The third part concerned the three dimensions of openness, equity, and justice. We obtained 289 questionnaires, of which 282 were valid. Other socioeconomic data on collectives and enterprises came from Statistical Yearbooks.

3.3. Variables

Based on our hypotheses, villagers’ willingness was the dependent variable, and asset specificity and transaction uncertainty (openness, fairness, and justice) were the independent variables. The human asset of collective economic organizations includes education level and specific skills organized by the collective leaders. The stronger the human asset, the higher the transaction costs (as shown in Table 1) [22].
Table 1. The definition of variables and description of statistics.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Definition</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset specificity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human asset</td>
<td>Education level ($X_1$)</td>
<td>3.20</td>
</tr>
<tr>
<td></td>
<td>specific skills ($X_2$)</td>
<td>0.41</td>
</tr>
<tr>
<td></td>
<td>the number of collective leaders ($X_3$)</td>
<td>6.50</td>
</tr>
<tr>
<td></td>
<td>the number of villager’s representative ($X_4$)</td>
<td>8.50</td>
</tr>
<tr>
<td></td>
<td>Transaction costs ($X_5$)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parcel location attribute ($X_7$)</td>
<td>5.11</td>
</tr>
<tr>
<td>Geographical location</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>village level = 1, town level = 2, district level = 3, national standardized = 4, information platform = 5</td>
<td></td>
</tr>
<tr>
<td>Transaction uncertainty</td>
<td>Degree of disclosure of information about plot ($X_6$)</td>
<td>3.08</td>
</tr>
<tr>
<td></td>
<td>Degree of disclosure of information about results ($X_8$)</td>
<td>2.52</td>
</tr>
<tr>
<td></td>
<td>The way to bidding ($X_{10}$)</td>
<td>0.46</td>
</tr>
<tr>
<td>Openness</td>
<td>Income distribution ($X_{11}$)</td>
<td>3.86</td>
</tr>
<tr>
<td></td>
<td>The way of supervision ($X_{12}$)</td>
<td>2.53</td>
</tr>
<tr>
<td>Equity</td>
<td>The way to determine price ($X_{13}$)</td>
<td>2.62</td>
</tr>
<tr>
<td></td>
<td>Service charge ($10^2$ RMB) ($X_{14}$)</td>
<td>1.08</td>
</tr>
<tr>
<td>Justice</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>government evaluation = 1, third-party intermediary evaluation = 2, government, and third-party intermediary together = 3, third party, villagers’ representatives and enterprises participate = 4</td>
<td></td>
</tr>
<tr>
<td>Transaction frequency</td>
<td>Transaction frequency ($X_{15}$)</td>
<td>1.02</td>
</tr>
</tbody>
</table>

(1) Human asset includes education level, specific skills, the number of collective leaders, the number of villagers representative, transaction costs. The higher the human asset requirement, the higher the transaction cost. The higher the education level and special skills of traders, the higher the employment cost. The more village collective leaders, the more villagers’ representatives, and the higher the cost of organization and communication. The more transaction costs, the lower the interests of the villagers.

(2) Geographical location includes the plot scale and parcel location attribute. The location can be characterized with the distance from the traded land parcel to the town center. The closer to the town center, the higher the value of construction land. The larger the plot scale, the higher the transaction cost and the greater the risk.

(3) Transaction uncertainty include the openness, equity, and justice characteristics of the RCCL market transaction rules.

3.4. Methods

3.4.1. Estimation of Transaction Costs

In the RCCL market, the transaction process includes the following steps: transaction voting by farmers, government approval, information disclosure, transaction, and linking quota trading registration. The total transaction costs can be calculated as [22,29]:

$$C_{total} = \sum_{i=1}^{n} \text{Labor}_i \times \text{Time}_i \times 62.73 + \text{Cash}_i$$

(1)
where $C_{total}$ is the total transaction cost (yuan), $\text{Labor}_i$ is the number of people involved in stage $i$, Time is the days spent on the trading stage $i$; 62.73 is the daily salary (yuan/day), and $\text{Cash}_i$ is the direct expense in step $i$ (yuan).

3.4.2. Logistic Model

The logistic model is suitable for regression analysis with a dependent variable as a dichotomous variable. It is a model to analyze individual decision-making behaviors. Therefore, this paper selects logistic stepwise regression to quantitatively analyze the influencing factors of farmers’ willingness to enter the market under transaction rules. “Willingness to enter the market” is defined as $Y = 1$; “Unwillingness to enter the market” is defined as $Y = 0$. Let $X_1, X_2, \ldots, X_n$ be a set of vectors related to $Y$, and the specific formula is as follows:

$$
P = \frac{e^{\beta_0 + \beta_1 X_1 + \cdots + \beta_n X_n}}{1 + e^{\beta_0 + \beta_1 X_1 + \cdots + \beta_n X_n}}
$$

$$
Y = \text{Logit} \ P = \frac{e^{\beta_0 + \beta_1 X_1 + \cdots + \beta_n X_n}}{1 + e^{\beta_0 + \beta_1 X_1 + \cdots + \beta_n X_n}} \quad (2)
$$

4. Results

4.1. Transaction Costs

According to Equation (1), the total transaction costs can be measured by the sum of costs in each stage of the transaction process, which include labor costs, time costs, and cash. According to the Price Bureau in Ezhou, Hubei Province, the lowest standard for a monthly salary is 1380 yuan/month, meaning the daily salary is 62.73 yuan/day, which can be used to calculate the labor costs and time costs. The average transaction cost organized by rural collective economic organizations is ~22,580 yuan.

4.2. Logistic Model Results

According to the calculation results of the logistic model (Table 2), the related indicators affecting villagers’ willingness include transaction area, transaction cost, openness of transaction information, villager income distribution, and pricing. These variables significantly affect villagers’ willingness for RCCL to enter the market. The improvement of fairness, openness, and justice of the transaction rules not only promotes the transparency of market transactions but also improves villagers’ enthusiasm to participate in the RCCL transfer and improves the efficiency of market transactions.

<table>
<thead>
<tr>
<th>Dependent</th>
<th>Independent</th>
<th>Coef.</th>
<th>S. E.</th>
<th>Wald</th>
<th>$p &gt; t$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human asset</td>
<td>Education level ($X_1$)</td>
<td>0.608</td>
<td>0.011</td>
<td>1.336</td>
<td>0.220</td>
</tr>
<tr>
<td></td>
<td>Specific professional skills ($X_2$)</td>
<td>0.309</td>
<td>0.012</td>
<td>1.012</td>
<td>0.339</td>
</tr>
<tr>
<td></td>
<td>The number of collective leaders ($X_3$)</td>
<td>0.086</td>
<td>0.006</td>
<td>0.689</td>
<td>0.405</td>
</tr>
<tr>
<td></td>
<td>The number of village representatives ($X_4$)</td>
<td>0.061</td>
<td>0.022</td>
<td>0.225</td>
<td>0.604</td>
</tr>
<tr>
<td></td>
<td>Transaction costs ($X_5$)</td>
<td>$-0.198 ***$</td>
<td>0.307</td>
<td>9.823</td>
<td>0.002</td>
</tr>
<tr>
<td>Geographical location</td>
<td>Plot scale ($X_6$)</td>
<td>$-0.269 **$</td>
<td>0.005</td>
<td>4.601</td>
<td>0.036</td>
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<td></td>
<td>Parcel location attribute ($X_7$)</td>
<td>0.031</td>
<td>0.001</td>
<td>0.418</td>
<td>0.511</td>
</tr>
<tr>
<td>Openness</td>
<td>Degree of disclosure of information about plot ($X_8$)</td>
<td>0.801 ***</td>
<td>0.016</td>
<td>6.996</td>
<td>0.009</td>
</tr>
<tr>
<td></td>
<td>Degree of disclosure of information about results ($X_9$)</td>
<td>0.487</td>
<td>0.023</td>
<td>1.499</td>
<td>0.208</td>
</tr>
<tr>
<td></td>
<td>The way to bidding ($X_{10}$)</td>
<td>0.062</td>
<td>0.018</td>
<td>1.245</td>
<td>0.265</td>
</tr>
<tr>
<td>Equity</td>
<td>Income distribution ($X_{11}$)</td>
<td>0.954 ***</td>
<td>0.022</td>
<td>7.566</td>
<td>0.006</td>
</tr>
<tr>
<td></td>
<td>The way of supervision ($X_{12}$)</td>
<td>0.899 ***</td>
<td>0.007</td>
<td>7.034</td>
<td>0.007</td>
</tr>
<tr>
<td>Justice</td>
<td>The way to determine price ($X_{13}$)</td>
<td>0.202 **</td>
<td>0.002</td>
<td>4.830</td>
<td>0.021</td>
</tr>
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<td></td>
<td>Service charge ($X_{14}$)</td>
<td>$-0.026$</td>
<td>0.021</td>
<td>1.471</td>
<td>0.212</td>
</tr>
<tr>
<td>Transaction frequency</td>
<td>Transaction frequency ($X_{15}$)</td>
<td>0.385</td>
<td>0.012</td>
<td>0.357</td>
<td>0.597</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>$-4.660 ***$</td>
<td>2.214</td>
<td>6.981</td>
<td>0.004</td>
</tr>
<tr>
<td>$-2\text{Loglikelihood}$</td>
<td></td>
<td></td>
<td></td>
<td>92.658</td>
<td></td>
</tr>
<tr>
<td>Cox and Snell R-Squared</td>
<td></td>
<td></td>
<td></td>
<td>0.406</td>
<td></td>
</tr>
<tr>
<td>Nagelkerke R-Squared</td>
<td></td>
<td></td>
<td></td>
<td>0.562</td>
<td></td>
</tr>
</tbody>
</table>

** Significant correlations at the 0.05 level ($p < 0.05$, both sides); *** significant correlation at the 0.01 level ($p < 0.01$, both sides).
The main influencing factors of asset specificity are the transaction area and transaction cost, which affect the villagers’ willingness. The larger the area of RCCL involved in the transaction, the less likely the land is to be used for other purposes. The higher the transaction cost, the lower the villagers’ willingness to support the RCCL transfer. In addition, villagers are worried that the transaction area is too large. If there is a risk of default or uncertainty in the transaction, the greater the loss of the village collective economic organization and villagers, thus, with reduction of the transaction cost, the villagers’ support the RCCL transfer. Therefore, Hypothesis 1 is verified.

The main factors affecting the openness, equity, and justice of transaction rules (three dimensions) include the openness of transaction information, income distribution, and land pricing. The transaction rules are not open, fair, and just; villagers generally reflected that the information about the transaction plot was not clear and opaque. In the process of RCCL transfer, they did not have their own voice and cannot enjoy their rights to participate in the income distribution. In addition, the villagers said that the RCCL transfer lacked the supervision of intermediate institutions, so that the village collective economic organizations easily colluded with the land demander and the government, resulting in villagers’ rights being denied and villagers’ unwillingness to support the RCCL entering the market. Transaction information disclosure has a significant impact on villagers’ willingness. Under the transaction rules of the RCCL market, the more transparent the plot transaction information is, the more the cost of searching information for village collective economic organizations and villagers is reduced, the more the farmers’ rights and interests can be protected, and the more the villagers support entering the market. Income distribution impacts villagers’ willingness. The income distribution for villagers in the circulation of the RCCL is unreasonable. The land value is estimated according to the land development rights. The interests shared by most villagers do not match the land development value, and the income distribution among villagers is unfair. In addition, village collective economic organizations account for 70% of the total money in transactions, but how to distribute and supervise this part of money among villagers is not clear, which leads to inequality of income distribution. The villagers reflect that the income distribution between villagers is not equal. Therefore, the villagers hold a negative attitude towards the entry of the RCCL into the market. The pricing affects farmers’ willingness to enter the market. The villagers are not satisfied with the price of the RCCL transfer. The Ezhou trading platform stipulates that the land price is 160,000 yuan/μ. According to the development value of land [38–41], the price of 160,000 yuan/μ is low and unreasonable. Most villagers are not satisfied with this price and are unwilling to support the RCCL entering the market. Therefore, the openness, fairness, and justice of transaction rules affect villagers’ willingness to enter the market. The more open, fair, and just the trading rules, the less uncertain the trading environment is, and the more willing the village collective economic organizations and farmers are to participate in the RCCL transfer. Therefore, Hypothesis 2 was verified.

5. Conclusions and Discussions
5.1. Discussions
First, for the most representative rural collective economic organizations and villager rights and interests, the choice of indicators of the three attributes of transaction rules (openness, equity, and justice) is not always the case. Maybe a better indicator can be found in the future. Second, villagers’ attitudes towards the RCCL market are not entirely affected by the three attributes (openness, equity, and justice) of transaction rules. Here, we only discuss the main influencing factors, and other influencing factors are our next research plan. Third, our work provides some insights into protecting the rights and interests of villagers, which will contribute to the development of the RCCL market in other areas of China and worldwide, but protecting the rights and interests of villagers is not always the case.
5.2. Conclusions

The Ezhou implemented a rural-urban land linking quota training system and rural collectives’ economic organization. With villagers as the main body, perfect transaction rules can reduce transaction costs and improve transaction efficiency. Based on Williamson’s transaction cost theory, this paper constructs an analytical framework of transaction rules on villagers’ willingness based on transaction cost theory. The more open, fair, and just the transaction rules of the RCCL market, the more villagers’ interests can be protected. Therefore, the villagers can actively support the RCCL transfer and improve the efficiency of market transactions.

Firstly, from the perspective of asset specificity, the transaction area and transaction cost of the RCCL affect the villagers’ attitude towards entering the market. Larger transaction areas and higher transaction costs will affect the villagers’ interests and are not conducive to the efficiency of the RCCL transfer.

Secondly, the openness, equity, and justice of transaction rules seriously affect the villagers’ attitude towards entering the market. Perfect market trading rules can provide more open information and a fairer and more just trading environment to reduce the information searching cost, bargaining cost, and risk cost in the process of the RCCL transfer. Furthermore, good market trading rules protect the rights and interests of rural collective economic organizations and villagers and ensure the fairness of market transactions, which avoids corruption between the government and enterprises or village collective economic organizations. Transaction information disclosure, income distribution, and pricing significantly impact villagers’ willingness. More transaction information in the RCCL market can reduce the information searching cost and enable villagers to support the RCCL transfer to promote the development of urban-rural integration. During the investigation, the villagers generally reflected that the information in the transaction process was unclear, the income distribution was unfair, and the pricing was low, resulting in the denial of villagers’ rights and the loss of income. Openness to the disclosure of transaction information and accepting the supervision of the villagers is very important to protect villagers’ rights and interests.

5.3. Policy Implications

Using the Ezhou mode, the openness, equity, and justice rules of RCCL market transactions should be established to protect the rights and security of farmers when entering the market. Furthermore, it should be established to standardize and legalize the RCCL market, protect the safety of both sides of transactions, and save transaction costs. Firstly, information disclosure is not enough; transaction rules must standardize the information disclosure of the land linking quota, establish a standardized information platform, expand the scope of the information audience, and reduce transaction costs. Secondly, there is a gap in supervision in terms of fairness. It is essential to establish effective supervision channels that strictly supervise the transaction and make full use of modern information technology to find, solve, and deal with problems and protect the interests of villagers. Thirdly, the circulation price of the RCCL should fully listen to the villagers’ opinions, and the final price should be decided by the villagers who vote. The villagers are the owners of the RCCL and should fully enjoy the right to decide and distribute income. Establishing a good trading order and environment will achieve effectiveness and stability of market development and promote urban-rural integration development.

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