

The Effect of Land Property Rights on China's Rural-Urban Migration

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Abstract. China's rural land system, a fundamental economic system essential for rural construction, agricultural development, and farmers' income in China, is currently being reformed through the Three Rights Division (TRD) mechanism to promote transformation of land management and improve the security of land contract rights. This paper examines the effects of rural land systems in China on migration, considering market mechanisms, such as land rentals, and government mechanisms, such as land expropriation. Analysis using the Probit model reveals why renting land has had a constructive effect on migration in China through the TRD reform that promotes land security and encourages migration through both market and government mechanisms. Moreover, the TRD boosts urbanization because industry structure upgrades assist China in avoiding possible middle-income traps and Lewis turning points, thereby fostering overall economic growth.

Keywords: Land Property Rights; Rural-Urban Migration; Urbanization; Middle-Income Trap; Lewis Turning Point; Economic Growth; China's Land Reform.

1. Background and Literature Review

1.1. China's Land System

China's land system has evolved considerably since the establishment of the People's Republic of China (PRC) in 1949. Initially, the 1950 PRC land reform demolished feudal land ownership and redistributed land to peasants, based on labor contribution, with the intention of establishing more egalitarian land ownership. Between 1953 and 1956, the transformation of agricultural socialism transitioned farmers' land to collective ownership, which created a more equal distribution of land among farmers. This collective ownership was expanded during the people's commune era after 1958, which continued the trend of evenly distributing land on an even larger scale. Two decades later, the 1978 Household Responsibility System (HRS) marked a major change in land distribution, by replacing large-scale collective ownership with socialist public ownership, which distributes land based on labor output. Most recently, the 2014 Three Rights Division (TRD) reform introduced a more nuanced approach, by separating ownership, contracting rights, and management rights, with the aim of enhancing land management efficiency and security (Chen, 2014). This historical progression highlights the dynamic nature of China's land system, which is historically interlinked with the country's rural-urban migration patterns.

1.1.1. China's Land System: Urban and Rural

Historical context reveals how the policies governing China's urban and rural land systems have different approaches and intents, as the primary difference between urban and rural land systems lies in ownership. In China, urban land, which includes mines, rivers, and deserts, is owned by the people yet managed by the state. In contrast, rural land is owned collectively by local communities (Mullan et al., 2011). In the early years following the establishment of the PRC, urban land ownership included both state-owned and private land—but only for a short period of time. The “82 Constitution” marked a major milestone in land ownership, due to the consolidation and unmitigated nationalization of urban land, which transitioned policy into a single state ownership model (Mullan et al., 2011). By 1998, the Chinese government declared it would exercise state land ownership on behalf of the PRC, making China's government the sole body responsible for urban land ownership.

In contrast, the rural land system has its roots in the mid-20th century, with the formation of the Rural Land Public System. The nationwide land reform extensively boosted farmers' enthusiasm toward labor by redistributing land. Despite minor adjustments, rural collective ownership was implemented in all parts of rural China until the major rural reforms of 1978. Over time, from the HRS policy launch to the present, this system evolved in that it gradually formed a blueprint for the separation of ownership, management rights, and contract rights.

1.1.2. Household Responsibility System (HRS) Land Property Rights Characteristics

The HRS transformed China's agricultural sector, by (1) contracting land, other production materials, and production tasks to farmers and (2) considering the family as “the unit,” while still maintaining collective ownership. This arrangement provides farmers contractual management rights, which they can transfer voluntarily for compensation during the contract period. This flexibility encourages investment in land improvements and increases agricultural productivity. In addition, the HRS also protects farmers' rights, particularly in land acquisition, in that all land acquisitions must follow controlled scales and procedures to safeguard farmers' interests, which prevents arbitrary land seizures (Chen et al., 2014). Consequently, the HRS balances collective ownership with individual management, which has fostered China's rural economic development and social stability.

1.2. Migration

A major demographic and economic phenomenon in China, rural-urban migration, is driven by several factors, which include economic opportunities, policy reform, and restructuring of the agricultural sector. Rapid industrialization and urbanization in China that began in the late 20th century created a high level of demand for labor in urban cities, which enabled millions of rural residents to migrate to cities for advantageous work opportunities. The HRS also played an important role in increasing agricultural productivity and freeing up surplus labor, which further increased migration. In addition, reforms in the land tenure system, such as the Three Rights Division (TRD), enhanced land security and rental markets. This promoted rural-urban migration because it made it easier for rural residents to lease their land and move to urban centers (Mullan et al., 2011), which contributed substantially to China's economic growth.

1.2.1. Profits of Migration

Through increasing income, migration reduces poverty in rural areas, which results in greater urban-rural equality for individuals. At the national level in China, migration helps to activate the unutilized economies of scale because it has an enormous estimated potential productivity gain of at least 35% for most cities. In addition, migration improves the regulation and standardization of rural land use, which helps to protect the environment. Moreover, migration has positive effects on urbanization and industry structure upgrades because it helps in circumventing the middle-income trap, which is an economic circumstance in which those with middle-income status struggle to transition to high-income status due to factors such as stagnant productivity and lack of innovation. Furthermore, migration helps prevent the Lewis turning point, which occurs when a developing economy's surplus labor from rural areas is fully absorbed into the industrial sector, causing wages to rise and reducing the competitive advantage of cheap labor.

1.3. The Mechanisms of Land Property Rights Effecting Migration

The mechanisms through which land property rights effect migration in China is complex, and they involve both market and government factors. If land property rights are secure because land can be rented, then the market mechanism lowers migration costs by increasing labor mobility, which makes it easier for people to move to urban cities for higher wages. However, if land property rights are poorly protected and there is a risk of expropriation, then it can complicate the effect of migration on the economy, due to the risks and potential returns of instability in the market that it creates.

1.3.1. When Land Property Is Protected (Renting Land Out)—Market Mechanism

When land property rights are secure and land can be rented out, migration is influenced through the market mechanism, and greater land mobility is encouraged. When farmers are given the ability to lease land, they can generate income from their land, even when they are working in urban areas, which reduces economic loss of land left unused (Mullan, 2011). As a result, the rural land leasing market further develops, which fosters economic growth and redistribution of labor between agricultural and non-agricultural sectors (Kimura et al., 2011). However, some rural workers are hesitant about giving up land-use rights, due to the lack of urban social security benefits (Ma et al., 2016).

1.3.2. When Land Property Is Not Protected (Appropriation)—Government Mechanism

In cases in which land property rights are not protected well, particularly when there is a risk of appropriation, government mechanisms could adversely affect migration patterns. For example, the incomplete implementation of the Rural Land Contracting Law could lead to major land insecurity, which acts as a barrier to migration (Mullan et al., 2011). However, the possibility of land expropriation can not only increase the incentive to migrate to urban areas, but also avoid insecure land situations in which property rights are not actively protected. Research shows that in areas with very poorly developed land leasing markets, tenure security—the assurance that individuals or groups have legal and socially recognized rights to use, manage, and control land or property, without the risk of involuntary eviction or loss of rights—heavily influences migration decisions, while other factors play a more meaningful role in regions with more developed markets (Ma et al., 2016).

2. Empirical Analysis

2.1. Data

The China Health and Retirement Longitudinal Study (CHARLS) aims to gather a high-quality, nationally representative sample of Chinese residents aged 45 year and older to support scientific research about the elderly because they experienced all major land reforms in China first-hand. The baseline national wave of CHARLS, initiated in 2011, includes approximately 10,000 households and 17,500 individuals across 150 counties/districts and 450 villages/resident committees. These individuals are tracked every 2 years. All resulting data is made publicly available 1 year after the end of data collection.

2.2. Regression Model

$$Y(\text{migration}) = \beta_0 + \beta_1 * X_1(\text{land property right}) + \beta_2 * X_2(\text{age}) + \beta_3 * X_3(\text{gender}) + \beta_4 * X_4(\text{education}) + \beta_5 * X_5(\text{income}) + \dots + \beta_n * X_n(\text{health status})$$

Table 1. Market Mechanism of Land Property Rights Effect on Migration

	Coefficient	Robust std. err.	z	P > z	[95% confidence interval]
migration					
rent per	0.623455	0.290607	2.15	0.032	0.053875 1.193034
logincome	0.13562	0.053283	2.55	0.011	0.031188 0.240052
prov					
5	-0.46981	0.523988	-0.9	0.37	-1.49681 0.557186
15	0.754246	0.46542	1.62	0.105	-0.15796 1.666452
25	0.949494	0.62752	1.51	0.13	-0.28042 2.179411
age					
40	0	(empty)			
50	-0.30606	0.804929	-0.38	0.704	-1.88369 1.271571
60	-0.13906	0.770569	-0.18	0.857	-1.64935 1.371228
edu					
2	-0.08864	0.174473	-0.51	0.611	-0.4306 0.25332
3	-0.44057	0.263919	-1.67	0.095	-0.95784 0.076706
gender	1.507552	0.166509	9.05	0	1.181199 1.833904
party	-0.9813	0.256574	-3.82	0	-1.48418 -0.47843
han	-0.29679	0.290888	-1.02	0.308	-0.86692 0.27334
health	0.030358	0.083017	0.37	0.715	-0.13235 0.193069
cons	-1.11465	0.911405	-1.22	0.221	-2.90097 0.671673

Table 2. Government Mechanism of Land Property Rights Change on Migration

		Robust				
migration	Coefficient	std. err.	z	P > z	[95% confidence	interval]
appropriation	-0.19161	0.166445	-1.15	0.25	-0.51783	0.134617
logincome	0.118252	0.046171	2.56	0.01	0.027758	0.208746
prov						
5	-0.32192	0.445794	-0.72	0.47	-1.19566	0.55182
15	0.341079	0.374882	0.91	0.363	-0.39368	1.075834
25	-0.14666	0.659771	-0.22	0.824	-1.43979	1.146462
age						
40	-0.04197	1.109864	-0.04	0.97	-2.21726	2.133323
50	0.76071	0.644187	1.18	0.238	-0.50187	2.023293
60	-0.07177	0.611609	-0.12	0.907	-1.2705	1.126963
edu						
2	-0.24843	0.147585	-1.68	0.092	-0.53769	0.040827
3	-0.52687	0.235375	-2.24	0.025	-0.9882	-0.06555
gender	1.291891	0.132309	9.76	0	1.032571	1.551211
health	0.104295	0.064691	1.61	0.107	-0.0225	0.231087
cons	-1.78976	0.690474	-2.59	0.01	-3.14306	-0.43646

3. Analysis

Building on Mullan et al. (2011), we conducted an empirical analysis using the CHARLS dataset, which includes approximately 10,000 households and 17,500 individuals across 150 counties/districts and 450 villages/resident committees. Consistent with Mullan et al. (2011), our results indicate that the ability to rent land increases the likelihood of rural-urban migration, thereby expanding the size of urban workforce and fostering economic growth. However, the negative effect of land insecurity on migration appears to be more difficult to predict, as we found that Chinese Communist Party members are less likely to migrate under market mechanisms.

3.1. Market Channel

Our analysis suggests that allowing the transformation of management rights in China will likely increase the probability of migration, which is crucial to China's urbanization and economic development (Zhang et al., 2003) and has important effects over an extended period (Liu et al., 2003). In addition, population inflows are expected to facilitate the upgrading of China's industrial structure (Wang et al., 2006), which highlights the substantial influence of migration on this process (Liu et al., 2008). In essence, China's new TRD reform is anticipated to stimulate migration, thereby advancing both urbanization and the upgrade of the industrial structure. Moreover, a labor shortage could trigger the Lewis Turning Point (Lewis, 1972) and potentially lead to a middle-income trap in China. Although whether China is currently facing these challenges is debatable, migration indeed plays a crucial role in addressing them. Indeed, the newly implemented TRD is expected to further enhance migration, which contributes to these solutions.

3.2. Government Channel

The difficulty in defining a combination of variables that yields precise and distinctive results regarding the claim that land insecurity has an undesirable effect on migration is a problem, although the results from the regression model are statistically significant. The theory that land insecurity does not have an adverse effect on migration is consistent with Mullan et al. (2011), and our empirical analysis reveals that when land is insecure, the likelihood of migration decreases. When (1) land is either collectively owned or owned by the state and (2) users might face land reallocation upon migrating, they may choose not to migrate to protect their land rights; however, TRD reforms aim to guarantee land security. Under the TRD system, the contractual right to operate homesteads will be

confirmed. The proposal to secure farmers' land rights, while maintaining collective ownership of the homestead, will ensure—at least theoretically—that farmers, as members of the collective economic organization, acquire land usage rights. This reform is expected to reduce land insecurity, thereby increasing the likelihood of migration and boosting China's economic growth.

4. Conclusion

4.1. What We Have Done in This Paper

We examined the effect of the rural land system on migration, a key factor in China's current economic development. Our study involved an empirical analysis, based on CHARLS data, which included the construction of identification models, robustness checks, and assessments of endogeneity. We targeted the effects of the TRD reform, which separates ownership, contract rights, and management rights, on the migration patterns of Chinese rural populations.

4.2. Our Evidence-based Conclusion

The results of our analysis clearly indicate how the ability to rent land increases the likelihood of migration, which fosters a positive economic effect, while factors, such as land insecurity and age, reduce this likelihood under both market and government mechanisms. In addition, our findings suggest a positive correlation between income levels and the likelihood of migration, which indicates that higher-income individuals are more likely to migrate to urban areas. The reason could be that higher income provides the necessary resources to cover the costs associated with migration and urban living. Moreover, our analysis shows that members of the CCP are less likely to migrate under market-driven mechanisms. This could be due to a variety of reasons, which include possible political incentives, stability provided by local positions, or benefits associated with staying in rural areas under market conditions. Although income growth is a positive factor in the impetus for migration, and CCP members tend to migrate less under the market mechanism, the negative effect of land insecurity on migration is possibly due to compensation mechanisms related to land expropriation, which can mitigate the perceived risks of losing land and, in some cases, provide financial incentives for migration.

4.3. Policy Implication

The TRD reform, by promoting the transformation of land management rights and securing contract rights, enhances the probability of migration through both market and government mechanisms. This enhancement contributes to urbanization, the upgrading of industrial structures, and the mitigation of the risks associated with a potential middle-income trap and the Lewis turning point. PRC policymakers should consider these findings when designing policies to support migration and economic development in China.

4.4. Future Effect

Future research on this topic should aim to quantify the extent of the rural land system's effect on migration and further examine the relationship between rural land system reforms and China's overall economic development. Future studies also could investigate the long-term effects of TRD reforms on rural populations and their contributions to sustained economic growth and social stability in China.

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