

A study on the capital accumulation system, distribution regulation mechanism and stakeholder relationships from the perspective of Marx's theory of ground rent

Di Xie

Liaoning University, Shenyang, China, and

Ying Rong

School of Economics, Liaoning University, Shenyang, China

Abstract

Purpose – Ground rent has been playing a vital role in China's economic and social development, which has a clear practical logic. It is also necessary to present the historical inevitability and institutional mechanisms that realize this role of ground rent concerning its theoretical and historical logic.

Design/methodology/approach – This paper draws on the theories of the French regulation school and the social structure of accumulation theory to establish a preliminary analytical framework. This paper explores the process of ground rent formation under certain land institutional arrangements, as well as the association between the capital accumulation system, the distribution regulation mechanism and relevant stakeholder relationships. From the perspective of historical materialism, the paper examines the functions of ground rent in feudal and capitalist societies and their mapping association between the capital accumulation system, distribution regulation mechanism and stakeholders. This paper further investigates the inevitable trends in the evolution of different social systems from the perspective of rent. Additionally, based on Marx's view on ground rent under socialism, the paper elucidates the formation, types of rent and its engagement in social production under the conditions of China's socialist market economy, identifying the inherent value orientation and distinct institutional advantages.

Findings – Although considerable research has explored the reasons for the existence, categories and functions of rent in a socialist market economy, there is a relatively insufficient examination of its historical evolution and how it influences real-world economic dynamics. Existing studies have primarily focused on agricultural rent, lacking an in-depth analysis that puts the behaviors of landowners, land operators and laborers in fundamental contexts.

Originality/value – As China enters a new stage of development, it is imperative to improve the public ownership of land from a new historical starting point, encourage the rational use of ground rent leverage, and establish and enhance the capital accumulation system, the distribution regulation mechanism and relevant stakeholder relationships, enabling their more harmonious alignment with the socialist market economy. The following effort should be made to ensure that such actions will be put into place.

Keywords Ground rent, Capital accumulation system, Regulation mechanism, Stakeholders

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Ground rent is one of the most important topics in Marxist political economy (Chen, 2017). Although considerable research has explored the reasons for the existence, categories and functions of rent in a socialist market economy, there is a relatively insufficient examination of



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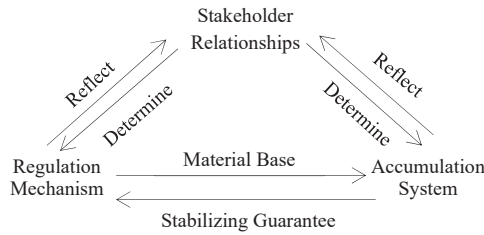
its historical evolution and how it influences real-world economic dynamics. Existing studies have primarily focused on agricultural rent, lacking an in-depth analysis that puts the behaviors of landowners, land operators [1] and laborers in fundamental contexts. This highly abstract theoretical research on rent has raised challenges for empirical research and specific applications. Even David Harvey failed to establish a convincing link between political-economic development, rent and regional differentiation (Jäger, 2003; Fine, 2019).

Without a clear definition of the association between the capital accumulation system, the distribution regulation mechanism and relevant stakeholder relationships, it is difficult to clarify the role ground rent plays in production, exchange, consumption and distribution (Xie et al., 2021, 2022; Hu, 2022b; Meng and Wu, 2020). Fully revealing these relationships requires analysis under the “specific historical contexts” of different historical periods, so as to explore the evolving nature and diversity of relationships in relation to land ownership (Haila, 1990). Notably, Marx repeatedly emphasized in *Das Kapital* that his analysis pertains only to the conditions of Western capitalist societies, and he did not believe that the thesis of *Das Kapital* applies to all social systems and Eastern societies (Marx, 1894, 1960, pp. 714–715). Therefore, it is necessary for us to clarify the historical evolution of rent and distill a law geared to the Chinese context, summarize the formation of socialist rent with Chinese characteristics and its participation in social reproduction, and propose corresponding suggestions and solutions.

It is worth noting that ground rent exists not only in agriculture and rural areas but also in urban, industrial, commercial and construction sectors (Marx, 1894, 1960, p. 874). However, there is essentially no difference between them; they are all involved with “the same gratuitous service as the natural forces”, and “this gratuitous service of past labour, when seized and filled with a soul by living labour, increases with the advancing stages of accumulation”, ultimately giving rise to a surplus profit, which could be converted into ground rent (Marx, 1894, 1960, pp. 726–727). This article focuses solely on the social system presented by the relationships among landowners, land operators and laborers as we seek to highlight the association between capital accumulation, the regulation mechanism and the stakeholder relationships reflected by rent and to emphasize the main trajectory of the contradiction between productive forces and production relations behind it.

1. Theoretical analysis of the capital accumulation system, distribution regulation mechanism and the stakeholder relationships

The accumulation system, the regulation mechanism and economic stakeholder relationships are deeply intertwined. In this context, dominant economic stakeholders in the wider economy and society seek to appropriate and obtain more economic surplus to meet the minimum capital allocation necessary for production or reproduction processes. They must also ensure that this surplus generates more value rather than being wasted while preventing the process of obtaining such surplus from disintegrating (Wolff and Yao, 2010). This inevitably involves two processes (see Figure 1): the process of surplus appropriation and the process of surplus distribution. The first one is related to establishing the accumulation system. It is primarily reflected in labor-capital relations, regional division of labor and how landowners unite with land operators to obtain as much rent as possible for reproduction rather than luxury consumption (Haila, 1990). Consequently, the accumulation system, to some extent, determines the ability, level and size of regulating economic resources. The second process involves the establishment of the regulation mechanism. It mainly manifests in spatial investment, spatial management and spatial allocation. Landowners and land operators use direct or indirect methods to ensure that rent can be used for reproduction. In reproduction, they strive to absorb inherent contradictions, conflicts and potential crises in the wider economy and society. The regulation approach, to some extent, determines the stability, reliability and sustainability of the accumulation system.



Source(s): Authors' own work

Figure 1. Diagram of accumulation system, regulation mechanism and stakeholder relationships

Accordingly, we attempt to establish an analytical framework based on the theories of the French regulation school and the social structure of accumulation (SSA) theory. This framework explores the core components of the capital accumulation system based on rent, the distribution regulation mechanism and relevant stakeholder relationships as well as their states of influence and restriction on each other.

1.1 Mechanism formation of capital accumulation system based on ground rent

Landowners collaborate with capitalists to obtain higher rents by leveraging land ownership, and the rents are used to manage land and space and reinvest in the reproduction of space. This process aims to meet the demands for size, efficiency and value appreciation in capital accumulation, capturing as much surplus value as possible. Specifically;

First, capital accumulates from labor-capital relations: Marx (1971) argued that the profit the capitalist gains is derived from selling “the commodity at its value, that is, as the crystallization of the total quantity of labour bestowed upon it” (pp. 221–222). In appropriating surplus value, landowners strive to maximize ground rents by cooperating with capitalists. For example, by easing restrictions on land capitalization, landowners can bind a large portion of low-wage labor under the capitalists’ control to poor land and promote industrial operation on poor agricultural lands and wastelands. Such practices convert rural labor into industrial workers, enhancing land productive forces and increasing the rent derived from labor process conversion. Additionally, by cooperating with capitalists, landowners can intentionally regulate the pace, size and efficiency of binding labor to land to create social unemployment. In this way, they build an industrial workforce pipeline, who will be exploited by capitalists and receive various “crumbs” (i.e. implicit economic compensation or transfer payments) from capitalists. Landowners can also integrate building spaces affiliated with land ownership into the capital accumulation process, providing venues for the reproduction of capital, labor and social relations. They give up a portion of ground rent, which capitalists will use to offer laborers resettlement and training. Therefore, capitalists are enabled to bind laborers more directly to means of production, extend surplus labor time and generate greater value for higher rents.

Second, capital accumulates from the regional division of labor. Capital accumulation can only occur in non-capitalist regions. Accumulation from exploitation, by nature, uses regional division of labor to increase rents in central areas (Aalbers, 2012; Aalbers and Haila, 2018; Luxemburg, 2021). For example, for a division of labor based on natural geographical differences, regions with flat terrain and convenient transportation are likely to develop into central markets with comparative trade advantages. These regions gain more favorable conditions for goods exchange, attract more capital, labor and technology, and increase ground rents in central areas. In territorial spatial planning, regions with agricultural, industrial and innovation functions have distinct roles within the national economic framework, necessitating varied investment sizes based on the minimal capital

requirements of different industries. Such different conditions resulting from spatial planning will lead to faster and larger-scale rent accumulation in regions undertaking industrial and innovation functions. For administrative function planning, authorities attempt to concentrate wealth, talent and cultural resources within their economic zones due to their non-productive functions and political influence on transactions in other regions (Lu, 2010). This compulsory concentration makes ground rents in administrative centers more vulnerable to central authority and their power.

Third, capital accumulates from capital circulation. Under a crisis of over-accumulation of capital, private capital, guided by the government, shifts from primary cycles of industries to secondary cycles of the urban environment and infrastructure construction and tertiary cycles of technology and social undertakings, increasing expenditures for long-term, land-based projects or the wider society to boost future capital productive forces (Harvey, 2003). In capital circulation, capitalists are increasingly relying on land and building spaces intensifies, allowing landowners to secure higher rents. For instance, amid declining industrial profits and oversupplied physical products, private capital – supported by government fiscal, tax and financial subsidies – redirects toward urban spatial development, such as public buildings, transportation networks, airports, hospitals, schools and urban water and sewage systems. These immobile, land-based investments with long life cycles can, to some extent, absorb surplus capital and labor, increasing rental values rapidly. When cities decline, private capital correspondingly shifts to scientific research and skill training sectors due to economic resource incentives. Since the suppliers of these resources often come from specific cities, the consequent private capital output (such as talent) is required to serve or bound up with designated regions. Ultimately, potential land values will be increased as future labor productive forces are enhanced, thus generating more rents for landowners.

1.2 Mechanism formation of the land-based regulation approach

Regulation of land and urban space and control over ground rent are crucial manifestations of land operators' regulatory practices. The regulation process is constantly intertwined with the accumulation process, and its effect will determine the size, efficiency and sustainability of capital accumulation. Specifically;

First, regulating through spatial investment. The essence of spatial investment is how landowners allocate part of their rent value for public construction or economic development. In developing countries, land is often considered as a vital tool for industrial policies and urban construction. The role of this tool can be achieved by attracting capital, labor and technology from other regions through tax exemptions on early-stage land development and government commitments to providing cheap or free public infrastructure. Some ground rent is ceded in exchange for development rights. Additionally, development methods that combine land, parcel planning and franchise are emerging. Utilization of mechanisms such as build-operate-transfer (BOT) and public-private partnership (PPP) to fund the construction of public infrastructure, such as toll roads, power plants, railways and urban subways, has become an important method to leverage rent value for urban development. As market mechanisms improve, more tools that utilize rent value for developmental become available, including but not limited to inclusive zoning (developers offer a certain number of low-cost housing units for low-to middle-income groups in exchange for the right to build market-priced or commercial housing), the integrated rail-property development model (the government grants developers the development rights for the land along railway lines to help itself raise funds for railway operation and construction costs) and land consolidation (private companies fund government tasks for specific industrial or urban construction projects in exchange for parcels with higher value) (Germán and Bernstein, 2018). These tools ensure that spatial investments cover more public welfare areas.

Second, regulating through spatial management. The essence of spatial management is to maximize the accumulated ground rent. In the early stages of urbanization, spatial

management primarily involves expanding rental value through the sale and purchase of spatial development rights (such as changes in floor area ratio), land status changes and land use changes. However, with the accelerated development of existing urban land and the insufficient reserve of urban land, more urban management strategies have been launched, such as urban renewal plans, inter-city industrial layout adjustments (moving highly polluting and energy-intensive industries out of a city) and increasing urban public service facilities (establishing more hospitals, schools and so on). These measures aim to attract more labor, capital and technology through re-urbanization. With the development of commercial credit, land rent is no longer merely a reflection of current value; it has also emerged as a financial asset. Rent levels are influenced by both local and global real estate market rents. This enables the government to drive further increases in land rent value through the allocation of scarce public services. Additionally, expectations of future rent income can be leveraged to package land rent into financial products, allowing for the issuance of more municipal bonds to acquire more development funds. Meanwhile, based on existing financial expenses for land, more industrial investment funds can be established to invest in urban industries and build industrial chains, thereby leveraging funds to attract more social capital.

All in all, regardless of the approaches used for spatial investment and management, the engagement of the government, financial institutions and other public organizations is indispensable. In fact, a completely free market economy does not exist in any country today; the economy is regulated not only by the “invisible hand” but also by distinct government control, fiscal policies, company plans and intergovernmental agreements (Kotz and Weir, 1997).

Third, regulating through spatial allocation. The essence of land allocation regulation is to prevent landowners from the unearned appreciated land value created by society as a whole; instead, a portion of this additional income from rent should be returned to society (Walters, 2013). For instance, part of the profits from land development can be retained as a development fund and invested for value preserving and growing. This income can then be used to fund low-income groups and public and collective consumption in impoverished areas within the jurisdiction. Plans can be made to build more parks, recreational areas, theaters, libraries, exhibition halls and other public buildings, thereby creating a garden city (Howard, 1902) and generating more productive consumption. Additionally, given that land planning might benefit some lands while causing the loss of developmental rights for others, it is necessary to use the additional income to establish compensation and benefit-balancing mechanisms between the two. Such mechanisms would provide more urban public transportation, attract more industries and enhance vocational education and training in underdeveloped areas. Furthermore, with economic development and technological advancement, property tax and tax increment financing (TIF) are used as new urban planning tools. This institutional design considers the dynamic impact of urban planning changes on land value compared to existing direct land taxes, indirect taxes levied on land and land costs that reflect the current value of land. It dynamically captures the incremental effects of urban planning on property prices (such as municipal services, landscaping, education and healthcare), thereby effectively reducing reliance on land finance.

1.3 Relationship between the capital accumulation system based on ground rent, the regulation mechanism and the stakeholder relationships

In the process of capital accumulation and management regulation, the relevant participating entities or classes hold diverse or even conflicting interests. Policymakers need to use administrative power to check these for the people. They may enact a plethora of constraints, rules and guidelines (Lefebvre, 1974), seeking a balance between exploitation maximization and prevention of accumulation disruption. Specifically;

First, the relevant stakeholder relationships are closely tied to capital accumulation. In terms of labor-capital relations, to obscure the fact that capitalists and landowners collectively exploit laborers during the capital accumulation process, vulgar economy falsely conceived that “the capitalist provides for laborers.” As a result, landowners take refugees among capitalists. Furthermore, they deem ground rent as necessary compensation for the risk of lending the land, trying to rationalize the appropriation of surplus value created by laborers and securely fixed profits. This misconception is exacerbated as laborers’ mistake such dependency relationship landowners acclaim in the virtual world as a rational real-world relationship (Marcuse, 1964) due to the influence of ideology, science and popular culture following technological advancements and the finer division of labor. On the geographical front, capitalists beautify central areas via fashion, sports, arts and advertising, establishing a “society of the spectacle.” Therefore, they endorse ground rent for these regions and mask the inherently inflated “false prices” of the land with a veneer of rationality. In extreme cases, to achieve exploitative accumulation, capitalists may leverage public opinion to create particular regional discrimination, extracting existing capital, labor and technology from peripheral areas to secure core assets at values far exceeding their prices. Ultimately, capitalist governments, swayed by their interest groups, can replace the will of the wider society with the will of the capitalists, fulfilling their specified accumulation tasks by assigning authorities under the guise of political correctness. This situation prevails in any economy with insufficient capital accumulation, no matter how well-established the social system or productive relations are (Lefebvre, 1974).

Second, the relevant stakeholder relationships are closely associated with the regulation mechanism. Economic imbalances in spatial accumulation eventually lead to political imbalances. For instance, under the pressures of economic and political crises, to garner support from laborers and peasants, capitalists strongly advocate for an increase in laborers’ standardized consumption (such as standardized housing), improving laborers’ urban living environments. They even resort to regulatory measures and collective bargaining to reduce actual rents, redirecting rents from landlords to laborers (Becker and Raza, 1999). Moreover, the capitalists leverage capital returning from peripheral regions and global competition to artificially create an illusion of prosperity, alleviating exploitation of production in central areas and achieving the goal of regulating class relations through technical rationality. They also use modern approaches such as consumption and entertainment to ensure that laborers willingly, rather than being coerced, integrate into the existing social system. Additionally, financial instruments have enriched the existing regulation mechanism. The monetary expansion with the characteristics of “three steps forward, one step backward” often leads the public to become desensitized to economic inflation (Massey, 1977; Lewis, 1955). Landowners and land operators can use the anticipated returns of land as collateral, so land is transformed into a financial product, and laborers are willing to overextend their future spending power to create a current living environment. All these serve both capital accumulation and ensure laborers willingly become “one-dimensional men” who do away with transcendence and critical thinking.

In essence, the relevant stakeholder relationships are the manifestations of production relations. Given private ownership, no matter how the relationships among relevant stakeholders are regulated, concealed or disguised, the transfer of social wealth and state power from one group to another remains inevitable (Marx, 1963a, pp. 331–385). However, the stakeholder relationships are also closely tied to the level of productive forces. The emergence of public ownership of means of production still cannot eradicate the attribute of “selfishness” (Marx, 1963b, pp. 561–563). It may even prompt landowners to develop land indiscriminately, not only failing to achieve reasonable compensation and sufficient rent but also leading to the waste of land value due to lack of competition.

2. Historical evolution of capital accumulation system, distribution regulation mechanism and stakeholder relationships

Institutions act as filters between individuals and capital stock, as well as between goods and labor output and income distribution (North, 1983). By examining the accumulation system, regulation mechanism and the relevant stakeholder relationships within the framework of land institutions (see Table 1), we gain critical insights into the functions, roles and practices of ground rent in different social systems (Ball, 1986). This approach helps explore the primary contradictions and inherent trends in the evolution of various social systems from the perspective of ground rent. Thus, “the productive forces developing within bourgeois society create also the material conditions for a solution of this antagonism” (Marx, 1962, pp. 526–527).

2.1 Accumulation system, regulation mechanism and stakeholder relationships in feudal society

Marx believed that, within the land relations of feudal society, the feudal lords not only occupied the land but also trapped serfs and peasants in personal dependence or semi-dependence on land. In feudal China, people believed that “all the land under heaven belongs to the king,” which made the monarch the nominal “sole landowner,” while the actual operators of the land were the “scholars and officials”. They shared the ground rent. The Chinese scholar-official class enjoyed political exemptions from taxes and often had multiple roles, such as bureaucrats, landowners and moneylenders (Wang, 2022). They could use multiple economic means, such as loans, taxes and corvée, to compel laborers to provide

Table 1. Historical evolution of the capital accumulation system, distribution regulation mechanism and stakeholders’ relationships

| | Feudal society | Capitalist society |
|---------------------------|--|---|
| Accumulation system | By utilizing political and economic means to annex land to compel laborers to provide forced or compulsory work or service, and collect rent in kind, rent in the form of labor and additional rent in the form of corvée. Laborers could only obtain the minimum subsistence necessary for survival | Employ legal measures to convert more agricultural land into industrial and commercial land. By artificially controlling the pace of land development, a larger industrial land pipeline is maintained for exploitation. Monopoly capital is used to extract economic surpluses from consumers and small and medium businesses forcibly |
| Regulation mechanism | Building palaces, waging wars, implementing water infrastructure projects, providing relief, so as to maintain centralized power | Expand public spending, encourage the working class to spend tomorrow’s money to alleviate the contradiction of insufficient effective demand, and coordinate conflicts between capital and labor, and between civil society and spatial dimensions to mitigate class antagonism |
| Stakeholder relationships | Relationships among landowners, land operators and laborers were sharply antagonistic, with heavy personal dependence of laborers on landowners | Relationships between landowners, land operators and laborers are still antagonistic, though laborers’ personal dependence on landowners has been fundamentally eliminated |
| Limitations | The existence of landlords and high rents hindered the process of primitive accumulation. The sprouts of capitalism in China’s feudal society struggled to evolve spontaneously into a capitalist society | Restrictions of private land ownership hinder spatial capital accumulation and capital circulation, leading to periodic economic crises |

Source(s): Authors’ own work

forced or compulsory work or service. In this scenario, laborers were not free individuals. Under the feudal landlord system, the entirety rather than part of the rent in kind and rent in the form of labor [2] were surplus value, representing exploitation as extra-economic coercion (Chen, 1955). Landowners “slaved tenant farmers (laborers) flagrantly” and even “asked the wives of tenant farmers to work in their homes, to which tenants dared not refuse.” This economic structure prevented any factors that could enhance the natural forces of the land from being utilized due to restrictive production relations. Moreover, apart from appropriating the products of surplus labor and compelled tenants to pay additional rent in the form of corvée, landowners encroached upon a part of the necessary labor products, threatening the survival of the peasants. Simple reproduction thus became difficult. Natural disasters such as floods, droughts and locust plagues often pushed peasants to the brink of bankruptcy. Although social productive forces stagnated under excessive feudal exploitation, feudal landlords did not in any way reinvest their exploitative gains into expanding reproduction or improving agricultural productive forces. Instead, they continued to annex more land to expand their exploitation of peasant production. Laborers could obtain only the minimal subsistence necessary for physical survival (Marx, 1894, 1960, p. 1039). Ultimately, peasants were caught by severe hardships and resorted to frequent uprisings. The California school argued that constrained by such productive forces and production relations, capital in China was destined to fail in achieving accumulation. Capital could not be optimally combined with labor and land, resulting in a lack of the dynamics of Smithian growth for economic take-off and hampering the further development of capitalism after sprouts (Pomeranz, 2000; Rosenthal and Wong, 2014).

So, where did the ground rent occupied by the feudal lords and bureaucratic landowners go in feudal society? Historically, after being concentrated in the hands of feudal lords and bureaucratic landowners, ground rent was used for the indulgence of the ruling class, the construction of palaces, foreign wars, the building of public facilities (such as water infrastructure) and maintaining social stability (like the establishment of “Changping granaries” for relief). The first two categories represent rent in the form of surplus labor consumed by the parasitic landed aristocracy for non-capitalist purposes. Rent was turned into an obstacle to capitalist production and accumulation (Scott, 1980). The latter three provided essential material foundations for maintaining the centralization of power in a feudal system.

2.2 Accumulation system, regulation mechanism and stakeholder relations in capitalist society

Based on the labor theory of value, capitalist rent represents one form of surplus value after excluding the average profit in the process of land management, reflecting the relationships among landowners, land operators (capitalists) and laborers. First, considering whether “living labor” is involved in the current production, landowners do not engage in any production activities and they are merely rack-renting parasites, producing nothing of value themselves. Second, from the perspective of the formation of means of production (land) as “materialized labor,” in contrast to Petty and Smith, who equated the appropriation of means of production with the role landowners and land operators play in value creation, Marx vividly revealed that these means of production are merely “surplus value” formed over historical periods that capitalists appropriated without compensation. It is actually the appropriation of the prior “living labor”. Third, instead of actually producing anything, landowners often appropriate the consequent fruits, securing future surplus value or appropriating others’ “living labor” as the value-added activities of rent are usually the result of the development of social productive forces. Thus, “the landowner may spend his whole life in Constantinople, while his estates lie in Scotland” (Marx, 1894, 1960, pp. 697–698).

As for the accumulation advantage, capitalism is able to appropriate profits and create a “great civilizing effect” by judicially and legally fictionalizing property rights over nature, land, life energy, desires and needs, achieving capital accumulation (Lefebvre, 1974; Hu,

2022a). Therefore, capitalism has the legal possibility of extracting more labor value. Meanwhile, with the progress of productive forces, the monopolization of land ownership and land management rights helps monopoly capital extract economic surplus from consumers and small and medium businesses at an accelerating pace. Workers are forced to accept increasingly unequal and unreasonable prices for their labor. They are compelled to sell more labor in the face of survival crises. Moreover, the non-labor time, where laborers could potentially exhibit creativity, is also imbued with false voluntariness and passivity. All these factors facilitate landowners and land operators to achieve capital accumulation under conditions of private ownership.

However, the contradictions among landowners, land operators and wage laborers are prevalent in this capital accumulation process. Here are the three scenarios. (1) When certain capitalists monopolize land ownership and operational rights for an extended period, other capital will be kept from free entry. Thus, the extra profits are fixed, resulting in disproportionate production within different sectors and accelerating the anarchy of production. (2) In the appropriation of greater profits and rent, regardless of how developed the natural forces of the land and the productive forces put into the land, it was difficult for laborers to share in these dividends. For instance, during the industrial revolution, the value added from converting agricultural land to industrial use did not benefit the farmers. A typical example is the enclosure movement characterized by “Sheep Eats Man”. Consequently, neither farmers nor some landowners welcomed technological progress as they did not benefit from land appreciation. Therefore, their consumption capacity was insufficient to promote capital accumulation driven by supply-demand interaction. (3) In the interest of capital maximization, capitalists prefer to exhaust and repeatedly exploit better urban land rather than utilize inferior urban land that mixes with better land parcels, which leads to the formation of numerous urban villages and slums. As a result, the productive forces of additional investments and the rent decrease during capitalist production (Marx, 1894, 1960, p. 817), ultimately limiting the capital accumulation activities and the adjustment mechanism based on such accumulation.

From the perspective of the regulation mechanism, capitalist societies have made the following efforts to mitigate the inherent contradictions in the capital accumulation process. First, capitalist societies aggressively pursue external expansion, attempting to achieve accumulation by dispossession through a “center-periphery” structure. However, in reality, once any space defined by land is integrated into capitalism, it can merely function as a specialized element or feature within the broader framework of capitalist expansion without disrupting the prevailing production relations of capitalism (Lefebvre, 1974). This approach only temporarily postpones but does not fundamentally resolve the structural contradictions of supply-demand imbalance. Second, efforts have been made to absorb economic surplus through increased government administration, public welfare programs and encouraging laborers to consume in advance. Nevertheless, these measures prove insufficient to absorb the entirety of the economic surplus. There is a propensity to generate more and more surplus without providing the necessary capital to absorb such surplus. This failure impedes the formation of a balanced consumption and investment framework essential for the smooth operation of capitalism (Baran and Sweezy, 1966) and burdens the government with financial strain. Third, measures to alleviate class conflicts have been implemented, such as introducing rent and housing price control mechanisms, regulating the room for rising rents and designating public spaces within land parcels for low-income groups. Capitalist societies seek to mitigate domestic class conflicts by taking actions, such as increasing the proportion of public and collective consumption, promoting low-rent and public housing systems and enhancing coordination between capital and citizens. Additionally, profits appropriated through the global labor division are utilized to ease class tensions at home. However, due to the constraints of land private ownership in capitalism, these social redistribution structures and regulation mechanisms deriving from class compromise often become unsustainable in the face of declining average profits from capital. Eventually, capitalist spatial accumulation

reaches a breaking point when it can no longer satisfy the ever-expanding needs of capital, leading to a massive economic crisis.

3. Capital accumulation system, distribution regulation mechanism and relevant stakeholder relationships under the socialist market economy

Marx viewed communal land ownership under socialism as the natural basis for collective appropriation, whose historical context provides it with the ready-made material conditions for cooperative labor organized on a large scale; this kind of land ownership makes everyone “landowners” and beneficiaries of land. The benefit of this ownership is manifested in three main aspects: First, the parasitic nature of landowners who always control the fixed surplus profits under capitalist production is eliminated; public ownership does not hinder the equalization process of capital invested in land (Marx, 1894, 1960, p. 872). Second, communal land ownership differs from capitalists, who refrain from investing unless the average profit is ensured and they are also different from landowners who lease land only if they can receive rent. Instead, people under socialism only need to ensure that the surplus profit is sufficient to maintain reproduction after deducting actual production costs, particularly when this arrangement is supportive of social reproduction. For example, for the development of large-scale industry, the surplus labor attached to land input can be returned to society, effectively promoting economic development (Marx, 1894, 1960, p. 911). Third, communal land ownership ensures that landholding is a perpetual process, free from the “relative barrier” of having to recover investment within the term of land leases, especially in urban construction (Marx, 1894, 1960, pp. 861–863). These advantages provide the economic foundation for effective accumulation and regulation in a socialist society.

However, during the period of the planned economy, the Chinese government had the exclusive authority to allocate land gratis. This is reflected in the central government’s 1954 directive to local authorities to “swap land for construction funds”, without charging state-owned enterprises, government institutions, military units and schools with land use fees or rents for their occupying suburban land. Such policies prompted local governments to rashly expand land in an attempt to gain social accumulation for expanded reproduction. Limited capital was not efficiently concentrated on the best land but rather dispersed across different regions and types of land, even poor land, preventing land from maximizing its strength as a natural force and leading to widespread inefficiency in capital and land resource utilization. Consequently, the potential role of ground rent as a means of accumulation and regulation was not fully realized. The fundamental reason is that as long as the productive forces are still insufficiently developed to make competition superfluous (Marx, 1960, p. 385), relying solely on the advancement of production relations to drive the development of productive forces cannot truly achieve its goals. It is essential to address new development challenges through the combination of socialism and the market economy.

In the socialist market economy with Chinese characteristics, on the one hand, the market competition mechanism induced by supply-demand interaction and individual game strategies allows the government to generate higher land revenue than the planned economy period and to fully capitalize on the land value appreciation brought by socio-economic development. On the other hand, the advantages of China’s public land ownership transform ground rent into a policy tool for spatial management. Therefore, regulation and operation of labor, capital and technology in ways that align with factor endowment structure are enabled to magnify the role of ground rent in the process of social reproduction. Additionally, rent-based land finance allows timely responses to wealth inequality, regional economic differences and urban-rural economic divides. This approach even moderates the size and pace of reinvestment to ensure a solid footing that national capital accumulation relies on and smoother market operations. In this process of balancing efficiency and equity, the relevant stakeholder relationships among landowners, land operators and laborers become more inclusive.

3.1 Types, sources and institutional foundations of rent in a socialist market economy

According to Marxist political economy, wherever land ownership exists, along with a separation of ownership and usage rights, rent must be paid for the use of any parcel of land, even the least fertile. This is the essential characteristic of absolute ground rent. This still works for the absolute ground rent under the public ownership of land in socialism. In the context of a socialist market economy, public ownership of land dictates that any available land, including land for construction, industrial or commercial purposes, must be leased from the local government before being deployed in production and business processes. A portion of the profits from industrial, commercial and urban construction activities must be allocated to pay ground rent. This payment method is, however, somewhat concealed, typically completed upfront, yet it is fundamentally consistent with periodic payments. Therefore, the rent in a socialist market economy is essentially derived from “natural forces.” The natural productive forces of the land allow the labor invested in a piece of land to generate additional value. This extra value, depending on the supply and demand of the output (such as agricultural products, industrial goods, or commercial services) in the market, creates surplus profit attributable to the landowner.

In a socialist market economy, public land also has differential rent. In this respect, agricultural land and urban land are essentially the same. When residential, commercial and public buildings are constructed in urban and industrial centers, the owners of these building sites also earn rent and differential rent (Marx, 1894, 1960, p. 874). Differential rent I in agriculture is mainly determined by soil fertility and location of farmland; for urban land, it is closely related to the site’s topography, slope, geology, hydrology and, particularly, location. Differential rent II in agriculture arises mainly from the additional means of production and labor applied to the same size of land, and this law also governs the urban land. The investment of labor, technology and capital can significantly improve the condition of parcels, enhancing the productive forces of land per unit area. This analysis was elaborated by Marx when discussing building site rent and rent in mining. He provided a framework to analyze the trinity formula that involves Monsieur le Capital, Madame la Terre and the laborers. This framework transcends the idea of studying land in the agricultural context in isolation within the framework of the traditional binary oppositions (wages vs. capital, bourgeoisie vs. proletariat) (Lefebvre, 1974). Marx’s analytical approach is reflected in real-world scenarios. For example, according to China’s land requisition standards and compensation methods [3], various factors must be considered, such as land type, output value, land location, agricultural land grade, cropland area per person, land supply and demand, economic development level and minimum living standards at the urban level. These factors are essentially related to the formation factors of differential rent.

In a socialist market economy, there are two major sources of ground rent. First, a portion of the surplus value generated in the production process is converted into rent; second, the rent is “based upon an actual monopoly price” under public ownership. This rent is neither determined by the individual price of production being lower than the social price of production nor by the difference as a result of the prices exceeding production costs. Instead, it is determined by market prices being higher than the intrinsic value, driven by “the buyer’s needs and ability to pay.” Therefore, it is not directly converted through the production process but rather through circulation, being transformed from the distribution and redistribution of surplus value (Marx, 1894, 1960, p. 864).

When examining the economic and social relationships reflected by ground rent in a socialist market economy, it is evident that the relationships among relevant stakeholders – such as landowners, land operators and laborers – have changed fundamentally. Given that the public ownership of land empowers local governments with the function of managing urban areas, the parasitic nature and the ruthless appropriation of the fruits of social development that owners of private land have historically possessed are avoided. Moreover, an observable empirical fact is that, against the backdrop of local government promotion tournaments in China, local governments can adjust the supply–demand relationship and promote land

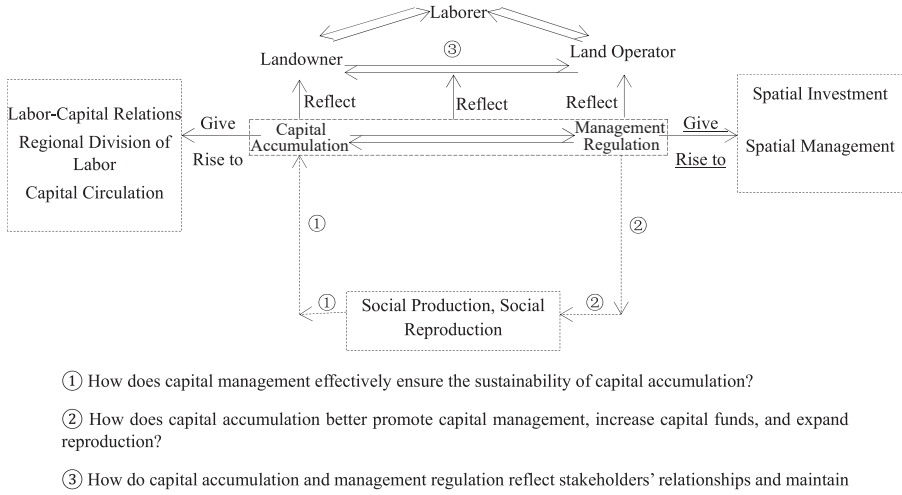
appreciation by rationally identifying land quotas. They drive urbanization to induce changes in the land zones and use of land and continuously enhance the construction of public infrastructure to attract capital and people to integrate with land efficiently. These actions have played an important role in promoting the rapid growth of China's urban economy. Simultaneously, as a consequence of public ownership of land, the socialized distribution and coordination of gains from land appreciation are achieved. According to Chinese laws and regulations, land transfer proceeds – after deducting demolition compensation fees and relocation expenses for displaced farmers and enterprise employees – are allocated proportionally in a fixed expenditure structure for urban infrastructure construction, additional land use fees, agricultural land development, urban low-rent housing security funds, state-owned land income funds, rural infrastructure and water infrastructure funds, educational funds and so on. Such a distribution method not only alleviates the capital constraints faced by local governments in land management (such as implementing infrastructure construction for traffic, electricity, tap water, rainwater drainage, telecommunication, cable TV, gas and level ground) but also safeguards the legitimate rights and interests of urban and rural residents and other relevant stakeholders. Reality proves that, under the socialist public ownership of land, the relationships between landowners, land operators, laborers and other stakeholders are no longer antagonistic, even though ground rent is collected according to market economy principles. Instead, they form a mutually beneficial and cooperative relationship based on public ownership of land. According to statistics, the revenue from land transfer fees in China has changed drastically, increasing from 129.589 billion RMB in 2001 to 8.7051 trillion RMB in 2021. Among these, compensation for land acquisition and demolition, compensation for displaced farmers and relocation expenses for enterprise employees have consistently accounted for more than 50% of total costs [4].

3.2 Social production process involving rent in a socialist market economy

China has fully utilized the advantages of the public land ownership system, allowing rent to play its due role in promoting economic and social development. Ground rent not only facilitates the development of productive forces and economic growth but also enhances the reproduction of socialist relations of production, driving comprehensive social progress. Chinese local governments hold dual roles as both landowners and land operators. They must consider the need for the development of productive forces, effectively combining market mechanisms with government interventions to allocate economic resources appropriately and achieve the goal of continuous capital accumulation. At the same time, they need to use the rent they acquire to continually improve urban infrastructure and meet people's aspirations for a better life. This approach constructs a sustainable system of capital accumulation, capital circulation and reproduction (See Figure 2). The distinctive features of China's approach can be primarily observed at the following two levels.

(1) The capital accumulation system:

First, capital accumulation accelerates, supported by the labor-capital relations based on public ownership of land. Engels (1971, pp. 509–510) pointed out: “Labour is the source of all wealth, the political economists assert. And it really is the source – next to nature, which supplies it with the material that it converts into wealth.” Given the extreme shortage of primitive capital accumulation during China's industrialization, from the founding of the People's Republic of China until the reform and opening up, China leveraged the advantages of public ownership of land. Therefore, China improved agricultural infrastructure to create more economic surplus by mobilizing rural residents to take part in voluntary labor and labor accumulation. This surplus was then concentrated through the collection of levies and centralized planning. Such agricultural economic surplus essentially constituted the substance of public ground rents. Based on this, through the price scissors between agricultural and industrial products, the agricultural economic surplus was transferred to cities and industries to supplement China's



Source(s): Authors' own work

Figure 2. Social production process involving rent in a socialist market economy

insufficiency in primitive industrial capital accumulation, thus accelerating the process of industrialization. After the reform and opening up, although this situation changed to some extent, it remains common to attract migrant workers to participate in urban construction and contribute surplus labor to urbanization based on public land ownership and the urban-rural dual structure. According to research statistics, in the first thirty years of the reform and opening up, low-income migrant workers in China who lack social security have accumulated 11.6 trillion RMB for urban economic development (Wen, 2013).

Second, capital accumulation accelerates, driven by the regional division of labor. In theory, rent income can increase as long as more inputs are added to develop more land. However, in practice, if the investment is made to develop quality land, rent income increases even faster. In this context, local governments often establish various economic and technological development zones, high-tech industry development zones and demonstration industrial parks within existing cities, offering them policy resources, such as fiscal subsidies, tax incentives, approval authorities and land support. As such, the rent will increase more than the additional capital (Marx, 1894, 1960, p. 780). At the same time, according to planning and development requirements, local governments designate leading industries at the provincial, municipal and county levels (for instance, national and provincial parks typically host high-value-added, high-profit, high-tech, low-energy-consumption and low-pollution industries; municipal functional zones generally host industries with higher output and longer industrial chains, with looser energy consumption and pollution restrictions). Relying on this “center-periphery” structure, China has significantly increased its pace of capital accumulation. Statistics indicate that regarding the quotas for scarce state-owned construction land supply in China, provincial capitals generally account for 50% and major prefecture-level cities account for 30% (Liu, 2022).

Third, capital accumulation accelerates in the circulation of capital. As capital is withdrawn from industrial operations and redirected toward urban construction and public investment, the Chinese government, based on public ownership of land, uses various policy tools to accelerate capital flows, which is conducive to faster capital accumulation. For instance, governments at different levels ensure stable and favorable returns for investment activities by completing construction plans and investment plans of regional infrastructure and public

facilities on schedule or ahead of time. China can thus complete infrastructure projects that can cover advanced credit overdrafts over the long term, all while maintaining relatively low financing costs. Not only does capital accumulation in the basic form of rent speed up, but local governments also accumulate a lot of high-quality state-owned assets.

(2) The distribution regulation mechanism:

First, leveraging local government investment in regulating the space economy and driving economic growth through land allocation. As de facto landowners and land operators, local governments can harness control over land and quota assignment to drive regional growth. They can exchange a portion of rent income for scarce capital, technology and future tax revenues. In this context, land allocation has become a vital tool in local governments' investment attraction policies. From 2003 to 2017, the annual supply of state-owned construction land increased from 86,400 hectares to 603,200 hectares, with an average annual growth rate of 6.4% [5]. Additionally, considering the needs of medium and long-term land development, local governments encourage linking rural construction land reclaimed as farmland with new urban construction land for a "balance of increase and decrease". This approach allows for flexible land supply or withdrawal based on land reserves and market demand, ensuring the stability of rent income.

Second, leveraging the local government's role in land management when regulating the space economy. Local governments in China have excelled in capturing land value through development. For instance, governments package land, urban assets (such as municipal facilities, cultural and sports facilities, recreational facilities, parks and green spaces) and urban resources (such as minerals, forests, mountains, rivers and shorelines) into land development companies controlled by the state-owned assets supervision and administration commission for urban management. For newly developed industrial parks, they develop urban light rail or metro projects, and for newly developed residential areas, they develop plans for schools, hospitals and parks.

Third, ensuring public services when regulating the space economy. China's comprehensive land price regulations consider location, supply and demand, socio-economic development levels and minimum living standards. According to applicable regulations on land acquisition, 10%, 10% and 8.4% of land revenue must be allocated to low-rent housing, education and rural infrastructure construction, respectively (Liu, 2022). In addition, compensation is provided based on the land's annual output value and household size. When land use changes and rental value increases, part of the rent income is allocated to compensate a broader range of laborers. Such compensations include but are not limited to projects for renovating urban shantytowns, transforming urban villages and recreating old neighborhoods, aiming to ensure that laborers in those districts directly benefit from the increase in rent income and experience consequently improved public services.

4. Policy implications and recommendations

Since the inception of reform and opening-up, the capital accumulation system and the distribution regulation mechanism, from the perspective of ground rent, have become pivotal driving forces for China's rapid economic growth and long-term socioeconomic stability. However, as China enters a new stage of development, it is imperative to improve the public ownership of land from a new historical starting point, encourage the rational use of ground rent leverage and establish and enhance the capital accumulation system, the distribution regulation mechanism and relevant stakeholder relationships, enabling their more harmonious alignment with the socialist market economy. The following effort should be made to ensure that such actions will be put into place.

4.1 Establish and improve a capital accumulation system that better aligns with a socialist market economy

First, develop a rent accumulation mechanism connected to industrial transformation, capital transfer, population mobility and land use quotas. This mechanism should encourage concentrating scarce land use quotas from low-efficiency areas and sectors to high-efficiency ones. Improvements should be made for the accumulation model that restricts labor and adopts forced labor division, encouraging part of the rent appreciation to be returned to urban and rural residents. For example, during the return of land tax revenues, a portion should be allocated to employee welfare or improving working conditions, fostering more flexible labor relations and enabling laborers to generate higher economic value.

Second, seek to break the barriers of market segmentation and administrative boundaries. As such, efforts should be made to eliminate restrictions on the free movement of labor, capital and technology and facilitate their concentration in central areas. Consistent effort is needed to enhance the priority of the central areas, ensuring that the accumulated rent surpasses the minimal capital allocation requirements. Simultaneously, a benefit balancing mechanism should be established to align with the current major function-oriented zone planning strategy, differential regional environment and development policies. Given the disparities in rent contributions across sectors, industries, regions and urban-rural distributions, it is crucial to propel regions with strong rent accumulation capabilities to share a portion of rent appreciation with peripheral regions (measured by their strength of space politics and economy) through a benefit-sharing mechanism, cooperative mechanism, cross-region ecological compensation and energy compensation. This helps achieve hierarchical accumulation across spaces and ensures the development rights of less-developed regions in the accumulation process.

Third, fully utilize urban assets, such as municipal, cultural and recreational facilities, parks and green spaces, roads and bridges, to maintain appropriate spaces for rent appreciation. Local governments are encouraged to prioritize the development of high-end productive services and high-value-added urban industries in central districts, structurally reduce industrial warehousing land and allocate more converted industrial land for public services, leisure, recreation and major infrastructure projects. Such measures will promote the rationalization and upgrading of the urban industrial structure and enhance the positive externalities of rent appreciation. Additionally, local governments are encouraged to repurpose properties on unused land (including industrial plants and warehouses) for education and training, product research and development, leisure and entertainment, and cultural and creative industries. Their actions are expected to enhance the spatial reproduction capacity of the rent and expand the future potential for rent appreciation.

4.2 Establish and improve the distribution regulation mechanism that better aligns with socialist market economy

First, enhance the efficiency of spatial investment and management in rent regulation. It involves tapping into the potential of urban land resources through improvements such as increased average floor area ratio, optimized land use structure and augmented comprehensive bearing capacity of land resources so as to explore more solutions for spatial investment and business models. In addition, the approach of combining high-tech infrastructure, contemporary landscape design, tree-like branching transportation networks, city landmarks and garden style manufacturing plants aims to create more diverse and multi-functional urban complexes, providing spatial production and consumption capacities that are proportionate with ground rent. Efforts should be made to promote the transformation of inherent industry resource endowments, location advantage of environments, and historical and cultural backgrounds, which are essential material conditions subordinate to the production process, into incremental resources available for rent accumulation and regulation approaches.

Second, improve the financial instruments for ground rent regulation. To this end, leverage surplus local financial positions to activate land-based resource assets. Also, focus on the

construction of state-owned asset operation platforms that use rent income as collateral in high-quality investment projects with sustainable inputs from the government and promising economic prospects, such as “new infrastructure and new urbanization initiatives and major projects”, ecological infrastructure and urban renewal projects. Develop an integrated model of “investment-operation-construction” by packaging rent income into various financial products to attract excess investments and savings, striving to improve the financial derivative functions of the rent. Simultaneously, solidify the physical foundation that the rent embodies by implementing measures, such as strengthening third-party asset appraisal to review existing land debts, controlling new land mortgage financing and managing the local fiscal deficit to mitigate systemic risks for the financialization of ground rent.

Third, enhance the shared distribution function of rent regulation. Explore establishing a comprehensive system for centralizing, collecting, managing and utilizing income from direct and indirect land value appreciation. At the provincial or national level, centralize income from the transfer of state-owned land use rights, relevant land taxes (such as property tax, land use tax and urban land appreciation tax) and portions of land operation income (such as rental fees for state-owned infrastructure and plant facilities). Allocate the incremental portion of centralized and centrally collected rent revenues to ecological governance, social security and welfare (education, healthcare, elderly care, etc.), intercity infrastructure projects, attracting industries to locate in underdeveloped regions and support for low-income groups (such as displaced farmers). This will ensure that the beneficiaries and those bearing the costs in the process of ground rent utilization are aligned with the responsibilities of revenue acquisition and expenditure.

4.3 Establish and improve the relevant economic stakeholder relationships that are better adapted to a socialist market economy

First, improve the comprehensive evaluation system for rent accumulation and take into account the relationships among multiple stakeholders. In the future, statistical agencies, together with authorities of natural resources, finance, development and reform, transportation and environment, shall rely on the regulatory function of urban rent to overcome information silos and build a government data platform and dynamic forecasting and monitoring systems for rent that cover various regions, cities and even sectors. Improve the comprehensive accounting of various types of rents and determine land unit returns based on inputs in environmental protection, public services, industries and transportation infrastructure. Develop a rent evaluation system that includes economic, social, ecological and innovation benefits, thus avoiding an excessive pursuit of rent appreciation and providing diversified policy options for urban development. Furthermore, assess whether the land is for intensive, diversified and high-quality land use. Reward regions with good performance of land use with additional construction land quotas, while penalizing regions with poor performance, such as land resumption by law or levies on idle land.

Second, balance the relationships among multiple stakeholders in the rent accumulation process. Accelerate the construction of secondary markets for land leasing, transfer and mortgage and integrate the current dual system of “paid transfer plus administrative allocation” into a market-oriented model. Such efforts would enable rent values to reflect supply and demand better, breaking existing ownership identity restrictions for land supply and land use entities, thereby continuously increasing rent values in market competition (Xie, 1994) and facilitating rent accumulation. Additionally, adjust the applicable and current policies to entitle local governments to more policies on converting agricultural land to non-agricultural land and ensure that rent revenue in the process of land resource capitalization can be used for local accumulation and distribution. Encourage the exploration of production and operation forms that include land rights as shares and allow more collective land value increments to be quantified into shares for villagers so that farmers can earn long-term property income amid changes in property relationships for reconstructing a new-type collective economy.

Third, balance the relationships among diverse stakeholders in the rent regulation process. Accelerate the establishment of urban and rural land banks, ensuring they bear the market functions of land assessment, management, storage, regulation and supervision. Transform property rights such as urban land use rights and rural land qualification or contract rights into a property-right-based foundation for laborers to share rent in order to balance public interests, depositors' rights and farmers' benefits. Adhere to the principle that "land appreciation belongs to the people" and prevent rent from being appropriated by private capital; in particular, avoid rent, in the form of high returns from real estate investments, to be transferred into developers' hands (Xie, 2012). Propose that the capitalization of land should provide more local employment opportunities and direct labor income to local laborers. Encourage allocating a larger share of current land revenue to include displaced farmers into urban household registration and social security systems and ensure that displaced farmers enjoy equal rights to education, employment and healthcare. In this way, ground rent revenue could become an effective means to support new urbanization, stimulate effective investment and promote common prosperity.

Notes

1. In this article, land operators refer to anyone who uses land as an object of labor, means of labor or as a necessary material condition in the production process, combining it with labor or capital for operational activities. Operators will manage the land according to need, such as using land as an object of labor in agriculture, as means of labor in industry or viewing land as a resource in the labor process for providing production or living space in the service sector.
2. There also existed money rents in feudal society, but money rent was not a universally prevalent form of rent.
3. See "Notice on the Development of Uniform Annual Output Value Standards and Comprehensive Land Price Benchmarks for Land Acquisitions" (Guo Tu Zi Fa [2005] Document No. 144).
4. Source: Data from various editions of the "China Land and Resources Statistical Yearbook."
5. Data sourced from various editions of the "China Land and Resources Statistical Yearbook".

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Corresponding author

Di Xie can be contacted at: xiedijiaoshou@163.com