

The Interplay between Financial Development and Urbanization: Evidence from Wuhan

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Abstract: This paper investigates the correlation between financial economic power and urbanization economy through the case study of Wuhan City. First, it elaborates on the conceptual framework of financial economic power, analyzing its core components, influencing factors, and specific functions. Subsequently, the urbanization economy is described by defining its essence, examining its origins and operational mechanisms, and identifying four key manifestations of its development, thereby deepening the understanding of urbanization economy. The paper then explores the concrete forms of financial economic power in urbanization economy through four dimensions: temporal patterns, spatial dimensions, operational mechanisms, and market structures. It highlights the specific impacts of financial economic power on urbanization economy and clarifies their intrinsic connection. Finally, using Wuhan City as a case study, the paper proposes strategies for leveraging financial economic power in urbanization economy. This study provides theoretical insights into the synergistic mechanism between financial development and urbanization, offering valuable practical guidance for similar cities in China and developing countries to optimize resource allocation, enhance economic efficiency, and achieve sustainable urbanization. The findings contribute to the academic discourse on regional financial economics while serving as a reference for policymakers in formulating inclusive financial strategies and urban development plans.

Keywords: Financial Economy Power; Urbanization Economy; Development strategy.

1. Introduction

China's urbanization has accelerated significantly in recent years, with urban areas becoming primary engines of national economic growth. As a central city in the central region, Wuhan has achieved notable progress in this process, yet faces persistent challenges including imbalanced regional development and resource allocation inefficiencies. These issues suggest that urban economic development depends not only on urbanization itself, but increasingly on the efficiency of financial activities. Financial capacity now serves as a critical determinant of capital flow speed, infrastructure investment quality, and industrial upgrading success, making it essential to understand its intrinsic relationship with urban economic operations.

While scholars have explored aspects of this relationship, their approaches often remain fragmented. Dong Minghui (2022) examined green finance and regional economy coupling, Yang Yijun (2021) focused on technological innovation and finance coordination in Wuhan, and Wang Jialing (2021) analyzed digital inclusive finance effects. Xu Jiahua and Cao Nannan (2022) investigated economy-finance coordination in Shandong Province. Such studies, though valuable, typically isolate either financial development or urbanization processes rather than examining their systematic interaction—particularly for new first-tier cities navigating accelerated growth. This gap leaves unanswered how financial economic power specifically manifests within urbanization economies and how cities might strategically harness it.

This study addresses these questions through a systematic case analysis of Wuhan. It first establishes conceptual frameworks for financial economic power and urbanization economy separately, then examines how the former manifests across temporal, spatial, operational, and market dimensions

within the latter. Building on this analysis, the paper proposes targeted strategies for leveraging financial capacity to advance Wuhan's urbanization quality. The findings aim to help Wuhan and similar cities coordinate economic and financial development, mitigate operational conflicts during rapid urbanization, and foster synchronized progress across financial systems and economic structures.

2. Overview of Financial and Economic Power

2.1. The Connotation of Financial Economic Power

Financial economic power, an inevitable outcome of China's urbanization, refers to the positive impact on economic development generated through organized financial activities. By facilitating economic expansion, it effectively accelerates urban economic growth. As a positive force driving urban development, it continuously expands the economic pie while extending financial activities, thereby strengthening the relationship between urban virtual finance and economic operations [1].

2.2. Factors Influencing Financial and Economic Power

The factors influencing financial economic power can be categorized into internal and external elements. Internal factors primarily refer to inherent characteristics of financial activities, including financial resource allocation, institutional frameworks, and systemic structures. External factors encompass mechanisms for distributing urban economic benefits and urbanization levels. For instance, financial economic power is influenced by the profit distribution mechanism. When such mechanisms are scientifically sound

[illegible]

3.3. Specific Manifestations of Urbanization

Economic Development

The externalities of industrial clusters. In urban economies, enterprises within the same value chain or supply chain coalesce in shared spaces, forming interconnected networks through modern industrial internet platforms. This facilitates the realization of economies of scale through industrial clustering, expands the depth and breadth of enterprise agglomeration, strengthens inter-enterprise linkages, and leverages the externalities of industrial clustering to effectively reduce overall operational costs, save resources, accumulate social capital, and thereby foster the development of distinctive urban enterprises [4]. The clustering of industries enhances the competitive advantages of urban specialty industries, driving high-quality urban development.

The externalities of transaction clustering. Urbanization-driven economic growth positively impacts urban development by effectively expanding city sizes and increasing urban populations. Consequently, commercial and consumer activities within cities become more frequent, leading to a broader consumer market and reshaping transaction patterns. For instance, the shift from single-store operations to chain operations leverages the externalities of transaction clustering to attract more consumers, enhance marketing effectiveness, and expand business scale. Against the backdrop of high-quality urban economic development, urban consumers' purchasing power has stabilized, ensuring the profitability of various commercial transactions.

The externalities of urban labor concentration. A city's scale is measured by its population size. Wuhan, with a permanent population of 13.6489 million, qualifies as a megacity that attracts a substantial workforce, boasting abundant labor reserves and generating labor concentration externalities. Negative externalities primarily manifest as overpopulation and severe human-land conflicts, while positive externalities are evident in stable labor market supply, fostering long-term industrial stability. A robust labor reserve provides essential talent for diverse industries, ensuring the smooth operation of production, manufacturing, and management activities.

4. The Specific Manifestation of Financial Economic Power in Urbanization Economic Operation

4.1. Time Form

In the economic operations of urbanization, financial economic power manifests as temporal dynamics that influence urban economic activities. This temporal manifestation primarily takes the form of financial resource

Urbanization economy refers to the comprehensive economic activities and related socio-economic processes triggered by urbanization. The essence of urbanization economy lies in its transformative nature. During urbanization, cities undergo significant changes in economic activities and production models. Thus, urbanization is not merely about population expansion but also involves improvements in economic efficiency and development quality [2]. As the foundation for stable urbanization implementation, urbanization economy differs from traditional urban economies in its faster growth rate, stronger innovation capacity, and greater impetus for achieving urbanization goals [3]. Compared to first-tier cities like Beijing, Shanghai, Guangzhou, and Shenzhen, Wuhan, as a new first-tier city, has relatively lower urbanization levels. However, its urbanization process is accelerating, and the urbanization economy now possesses broader development prospects.

The origin of city is the combination of city and market. City is the combination of city and market, which is a place suitable for living, social communication, production and

influence and intermediary power. Financial resources, encompassing various capital and funding sources, circulate in financial markets to supply industries in urgent need of capital. By capturing time value, these resources achieve appreciation, primarily through interest income. Financial institutions channel resources to enterprises by evaluating opportunity costs and time value to determine returns. As financial resources flow across industries, they impact urban economic systems by redirecting temporarily idle resources to sectors in need, thereby ensuring stable urban economic operations.

4.2. Spatial Dimension

In the spatial dimension of urbanized economic operations, the manifestation of financial economic power is primarily reflected in the regional characteristics of capital allocation. Virtual finance, however, operates with minimal spatial constraints, enabling various capital and financial elements to transcend geographical boundaries for circulation. Financial activities facilitate the exchange and allocation of funds between cities, effectively managing regional capital resources. This approach addresses the issue of insufficient internal capital resources within cities and promotes coordinated development of urban economies across regions.

4.3. Specific Operating Mechanism

In the process of urbanized economic operations, financial economic forces develop specific operational mechanisms that align with the city's economic framework and urbanization development level. These mechanisms ensure positive impacts on urban economic growth while facilitating the smooth flow of financial capital and resources [5]. Such well-designed operational mechanisms enable financial economic forces to effectively drive urban economic development. The mechanisms themselves require market-based construction and operation, leveraging market dynamics in urban economies to maintain robust vitality in both economic and financial activities.

4.4. Market Structure

The market structure of financial economic power primarily manifests in two forms: market competition and market monopoly. In the financial sector, urbanization-driven economic development has resulted in a near-monopoly by commercial banks, which dominate the seller's market. Other financial institutions remain relatively small in scale, with high entry barriers. Concurrently, competition exists among commercial banks and financial institutions in both financial products and services, with no single institution currently holding an absolute monopoly. Under these conditions, customers' choices of financial products and services are significantly influenced by the number of financial institutions, demonstrating a symbiotic relationship between urban economic development and the growth of the financial industry.

5. The Specific Influence of Financial and Economic Power on Urbanization Economy

5.1. Impact on Urban Internal Supply and Demand

Financial and economic power exerts a profound influence on urban economic development. As a key mechanism for

balancing supply and demand, it regulates internal urban supply-demand relationships through structural adjustments, thereby stabilizing urbanization progress [6]. In modern open market environments, this power channels capital to industries through efficient resource allocation, fostering sectoral growth. Enterprises consequently expand their product and service offerings, addressing supply-demand imbalances. When overcapacity occurs in specific sectors, financial institutions tend to reduce investments, curbing output to restore equilibrium and ensure sustainable urban economic operations.

5.2. Impact on Urbanization Construction Space

The influence of financial-economic power on urbanization manifests through its impact on urban land prices. As a fundamental driver of commercial economic activities, land prices (or land rent) not only reflect a city's level of urbanization development but also determine its sustainability. Financial-economic power intensifies the monetization of land assets and influences land rent rates through interest rate mechanisms. Fluctuations in land prices affect the threshold for attracting non-local populations. When financial interest rates are excessively high, land rent levels rise correspondingly, making it harder to retain residents. However, this increases population mobility. Meanwhile, rising land prices stimulate real estate development, which in turn boosts financial activities like mortgage services. This accelerates urban construction and infrastructure development, laying a solid foundation for urbanization-driven economic growth.

5.3. Impact on Urban Residents' Income

Financial and economic power significantly influences urban residents' income, savings, and investment, exerting substantial effects on urban economic development. Its impact on urban income primarily manifests in redistribution. Financial markets redistribute residents' income, with some allocating surplus disposable income to bank savings for interest or purchasing financial products. These funds ultimately serve as capital for financial institutions' investment and credit operations [7]. When urban financial strength is robust, interest rates decline, leading to reduced personal savings and increased investment. This stimulates demand from professional investment firms and enterprises, pooling more capital to meet economic activity needs and corporate operational requirements, thereby effectively advancing urban economic growth.

5.4. Promoting the Optimal Allocation of Urban Economic Resources

Financial and economic power directly influences urban economic operations and development, facilitating optimal allocation of urban resources. As an indispensable social market resource in urbanization, financial resources coordinate relationships among various elements and variables within the urban economic system, strengthen the modern urban economic framework, and promote the distribution of economic resources. This financial and economic power drives high-quality urban economic development by rationally allocating market resources, enhancing overall capital efficiency, increasing the value of capital utilization, advancing reforms in the modern urban market system, and achieving high-quality transformation

and upgrading of the urban economy.

6. Strategies of Wuhan City to Play the Role of Financial Economy in Urbanization Economy

6.1. Adjusting the Land Price Level in Wuhan Based on the Actual Demand

To harness financial power in Wuhan's urbanization economy, the primary task is to adjust land price levels by determining minimum and maximum rents based on regional economic development. However, under the influence of financial forces, the current land market's free circulation mechanism remains imperfect, with numerous issues existing in the implementation of land investment tools and price regulation policies [8]. Therefore, the Wuhan municipal government needs to further improve the free circulation mechanism of the land market and clarify land price levels across different regions. For instance, when the central urban area reaches saturation, it should appropriately strengthen social infrastructure development in surrounding areas, optimize the land market, regulate land prices, and guide orderly commercial relocation. This will promote coordinated development between urban regions, enhance land use efficiency, improve commercial investment efficiency, drive high-quality urbanization development, stabilize the land leasing market, and ensure financial market security and stability.

6.2. Building an Open and Inclusive Financial and Economic System

Wuhan must focus on building an open and inclusive integrated financial-economic system, improving regional financial markets, optimizing economic structures and operational mechanisms, and fully leveraging the positive impact of financial systems on socioeconomic development to enhance balanced and coordinated urbanization. The city should vigorously promote digital inclusive finance by lowering service thresholds, enabling financial services to reach broader demographics, industries, and sectors. This ensures disadvantaged groups in financial markets can access essential financial solutions to address operational challenges. By effectively utilizing financial power for resident redistribution, Wuhan can mitigate issues like opportunity inequality and wealth disparity during urbanization [9]. The city needs to establish policies supporting digital inclusive finance, encouraging commercial banks and financial institutions to develop accessible financial products that better serve urban residents. This approach will help eliminate financial discrimination in markets and promote high-quality urban economic development.

6.3. Give Full Play to The Market Regulation Function of Financial Economy

In the process of urban development, most cities in China have exhibited a phenomenon of imitative urbanization, where they follow trends by replicating successful urbanization and economic development models. However, considering China's national conditions, this trend-following approach actually holds distinct advantages. When overall urbanization and development levels remain relatively low, adopting the "trend-following" mindset can effectively enhance urban economic development. During this process, it

is essential to reasonably leverage financial and economic forces in market regulation, draw lessons from other cities' financial development models, and integrate Wuhan's unique urbanization characteristics to explore an effective urbanization development path [10]. By utilizing financial and economic forces to rationally regulate Wuhan's regional market, financial activities can guide the flow of resources across industries, enabling efficient utilization of resources in various sectors. This approach further expands product markets and financial market scales, effectively elevates Wuhan's overall consumption level, and drives urban economic development through market-oriented growth.

6.4. Improving the Financial and Economic Power Operation Mechanism of Wuhan

Wuhan must establish a distinctive industrial system with unique competitive advantages, develop high-potential industries, cultivate leading enterprises in relevant sectors, and ensure coordinated development across primary, secondary, and tertiary industries. In 2022, Wuhan was recognized as one of China's cities with the most specialized advantageous industries, with sectors like household electrical appliance manufacturing, textile and apparel production, pharmaceutical manufacturing, and food processing demonstrating strong competitiveness. To sustain this momentum, the city should continue developing its core industries while leveraging financial resources to drive structural investment reforms. By enhancing the regulatory and guiding role of financial activities in the real economy, Wuhan can optimize industrial performance. To achieve this, the city must strengthen financial mechanisms, amplify financial support for the real economy, improve marginal returns across industries, and ensure smooth economic operations—ultimately fostering healthy and stable urban economic development.

6.5. Optimize the Allocation of Urban Economic Resources by Utilizing the Transmission Function of Financial Economy

To optimize the economic operation model of urbanization and promote rational allocation of economic resources through the transmission function of financial economic power, it is essential to first conduct an accurate analysis of the consumption-production relationship in Wuhan City. This involves coordinating the interests of all stakeholders, resolving non-inclusive conflicts, and creating a favorable financial market environment for urban economic development. During the process of urban economic operation, it is necessary to classify industries based on their development potential and capacity to access financial resources, thereby establishing a differentiated financial system. This system should provide tailored financial products and services for customers with varying needs and credit ratings, ensuring their participation in urban economic construction and development, and contributing to urbanization efforts. Additionally, the Wuhan municipal government should strengthen economic planning for rural areas, utilizing the transmission function of financial economic power to channel resources from economically advanced regions to less developed areas. By leveraging the "first-rich driving later-rich" approach, this strategy will promote high-quality economic development in Wuhan City.

7. Conclusion

There exists a profound connection between financial-economic power and urbanization. Financial-economic power originates from urbanization, while simultaneously driving urban development to enhance both the pace and quality of economic growth. In Wuhan's urbanization process, strategic utilization of financial-economic power can better coordinate development dynamics and resolve existing challenges. Therefore, Wuhan should prioritize economic development as the core strategy, fully leveraging financial-economic power's role in urbanization through targeted measures. First, addressing the current issue of excessively high land lease prices, Wuhan should adjust land pricing based on actual needs, expand commercial economic activities, and continuously grow urban commerce. Second, it is essential to establish an open and inclusive financial-economic system, maximizing the market-regulating function of financial power to guide urbanization. Additionally, improving the operational mechanisms of financial-economic power, strengthening financial market systems, and optimizing urban economic frameworks are crucial. The transmission function of financial-economic power optimizes urban resource allocation, significantly enhancing the efficiency of urbanization efforts.

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