

Digital Inclusive Finance Empowers the High-Quality Development of County Economies in Shaanxi Province

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Abstract: With the vigorous implementation of the national rural revitalization strategy, digital inclusive finance has been practiced in the fields of "agriculture, rural areas, and farmers". It has effectively addressed the issue of financial service exclusion in rural areas, improved the efficiency of financial services in rural regions, and injected vitality into the economic and social development of county areas. As an underdeveloped western province, Shaanxi faces a relative shortage of financial resources, which to a certain extent restricts the development of its county economies. This paper first describes the basic overview of Shaanxi's county economies, then clarifies the impact mechanism of developing digital inclusive finance on the high-quality development of county economies, and finally analyzes the current development dilemmas of digital inclusive finance in Shaanxi's counties. Corresponding implementation pathways are proposed to enable digital inclusive finance to better empower the high-quality development of Shaanxi's county economies in the future.

Keywords: Digital Inclusive Finance; County Economy; High-Quality Development

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1.Introduction

Since China implemented the rural revitalization strategy, it has built a new development pattern based on new development concepts and promoted high-quality economic development. The Report to the 20th National Congress of the Communist Party of China points out that high-quality development is the primary task for building a modern socialist country in an all-round way. High-quality development has strong policy orientation, and its multi-dimensional attributes have been widely recognized. How to promote high-quality development has become a major practical issue facing China^[1]. Digital inclusive finance is a new financial format that integrates digital technology with financial services under the new technological background^[2]. The combination of the two is a strong driving force for financial work in the new journey and an important way to promote high-quality development. China's e-commerce, digital communication technology, Internet, artificial intelligence and other industries have developed well. The integration of the digital economy in multiple fields has laid a foundation for the development of digital inclusive finance and nurtured new momentum for high-quality economic development. Under the current situation of tight resource constraints, declining demographic dividends, and expanding structural transformation needs, digital inclusive finance has injected more convenient, accessible, and active financial tools into economic development. It is imperative to vigorously develop digital inclusive finance to promote high-quality economic development.

At present, the global economic digital transformation is accelerating. Emerging technologies such as information technology, data analysis, and artificial intelligence are reshaping the economic pattern. As a new financial service model, digital inclusive finance is rapidly changing the operation mode of the traditional financial system and exerting a profound impact on economic development. Theoretically, through technological means, digital inclusive finance can provide more convenient, efficient, and inclusive financial services, expand financial service channels, reduce financial service costs, and enable more county enterprises and residents to enjoy high-quality financial services, making it an important engine for promoting the high-quality development of county economies. However, the existence of the "digital divide" puts county enterprises and residents at a significant disadvantage in accessing and applying digital technologies. Against this background, whether digital inclusive finance can effectively promote the high-quality development of county economies is a question worthy of in-depth discussion. If yes, how does digital inclusive finance promote the high-quality development of county economies? Will its role be affected by the level of traditional financial development? These are extremely important and urgent issues to consider at present.

2. Basic Overview and Existing Problems of Shaanxi's County Economies

According to official statistics, 80% of Shaanxi's land area is in county regions, 55% of its permanent population lives in counties, and nearly half of its economic output comes from county economies. Promoting the high-quality development of county economies has become the key to realizing common prosperity for all people in Shaanxi, building a new urbanization system, tapping new economic growth points, and stabilizing and expanding domestic demand. In recent years, with Shaanxi's increased investment of funds and policy inclination towards counties, the development level of Shaanxi's county economies has steadily improved, but structural contradictions still exist, restricting the quality and efficiency improvement of Shaanxi's county economies^[3].

2.1 Continuous Expansion of County Economic Scale but Weak Overall Strength

In 2024, the GDP of county areas in the province reached 1.6 trillion yuan, accounting for 47.3% of the province's total, showing a continuous growth in the total volume of county economies. According to the "2024 Research on the High-Quality Development of China's County Economies" released by CCID Consulting under the Ministry of Industry and Information Technology, Shenmu City of Shaanxi Province ranked 28th among the top 100 counties in China with a GDP of 234.71 billion yuan. As an important part of the national Northern Shaanxi Energy and Chemical Industry Base, Fugu County was selected as one of the top 100 counties in western China with a GDP exceeding 100 billion yuan. Jingbian, Hancheng, Dingbian, and Binzhou also made the list of top 100 counties in western China. In addition, 21 counties have achieved a GDP exceeding 20 billion yuan.

Overall, Shaanxi's county economies maintain a good development momentum, but there is still much room for improvement compared with the eastern coastal areas of China. In terms of total volume, Shaanxi's county economies are generally weak, with low development levels, small economic scales, and few strong counties. There are 56 counties (cities) with a GDP of less than 20 billion yuan, and 40% of the counties (cities) have an economic growth rate lower than the provincial average, which has become a bottleneck restricting the high-quality development of the province's economy. In terms of structure, Shaanxi's county economies also show an unbalanced regional development pattern, with relatively backward development in Southern and Northern Shaanxi and significant regional development differences. Counties (cities) with a GDP of more than 20 billion yuan are mainly concentrated in Guanzhong and Northern Shaanxi, accounting for 88% of the total, showing a serious polarization between strong and weak counties. As "star" counties in Shaanxi, the proportion of per capita disposable income to per capita GDP in Shenmu and Fugu is lower than that of top 100 counties in developed provinces, indicating that Shaanxi needs to take more effective steps on the path of unifying "strong counties" and "prosperous people" to promote county economies to break through development bottlenecks.

2.2 Optimization and Upgrading of County Industrial Structure but Low Development Level

In 2024, the tertiary industry structure of Shaanxi's counties was 13.2:55.0:31.8. At present, Shaanxi has achieved the goal of eliminating "empty villages" in collective economies. Its apple, kiwifruit, and dairy goat industries rank first in the country, and the output value of protected agriculture has exceeded 100 billion yuan. Northern Shaanxi has formed a potential

industrial belt focusing on goats, red dates, and minor cereals; Guanzhong has formed a leading industrial belt focusing on dairy animals, beef cattle, vegetables, and grain; Southern Shaanxi has formed a characteristic industrial belt focusing on live pigs and tea. The industrial scale has been continuously expanded, industrial characteristics have become more prominent, and the quality of agricultural products has been continuously improved [4]. Despite these achievements, there are still problems of low development level in the industrial development of Shaanxi's counties. Some counties have an incorrect understanding of leading industries and blindly pursue "largeness, novelty, and comprehensiveness". Some leading industries have short chains, small output value scales, and low technological content of industrial products. Individual counties rely on traditional development paths, taking energy and chemical industry or cultural tourism as their leading industries, but fail to fully explore and utilize their resource advantages, resulting in the prominent contradiction of relatively primitive industries. In addition, there is a high degree of similarity in development among counties, with widespread phenomena such as industrial homogenization, unbalanced production capacity, insufficient coordination, and low concentration of industrial clusters.

2.3 Orderly Progress of Urbanization Construction but Inadequate Integration

To promote the integrated development of urban and rural areas and the integration of the primary, secondary, and tertiary industries, counties (cities) in Shaanxi have accelerated the pace of urban construction in recent years. In 2024, the urban population of Shaanxi's counties reached 26.15 million, with an urbanization rate of 66.14%, and the number of county legal entities exceeded 250,000. In 2023, the non-public ownership economy in the province's counties accounted for 46% of the total GDP of the province's counties, further enhancing the endogenous driving force for the development of county economies. With the orderly progress of urbanization construction, residents' lives have been continuously improved. In 2024, the growth rate of per capita disposable income of rural residents in the province was 2.4 percentage points higher than that of urban residents, and the urban-rural income ratio narrowed to 2.57:1. In addition, the total retail sales of consumer goods in the province's counties reached 401.824 billion yuan, with a growth rate 2.4 percentage points higher than that of the province's total retail sales of consumer goods.

The orderly progress of urbanization construction has, to a certain extent, realized the mutual promotion and complementary advantages between urban and rural areas, but there are still some problems. In 2022, county market entities accounted for only 28.92% of the province's total market entities, which is still low relative to the status and role of county economies. In recent years, through the strong village plan and thinning action for rural collective economies, the township collective economies in Shaanxi have gradually expanded, but as of 2023, the proportion of "weak villages" with an operating income of less than 50,000 yuan still reached 25.5%.

The above data shows that the driving effect of cities on rural areas in urbanization construction is insufficient, and the integration of urban and rural areas is not deep enough. Firstly, restricted by factors such as agricultural infrastructure investment and the development level of agricultural socialized services, the overall level of agricultural modernization in Shaanxi is still low, making it difficult for urbanization construction to promote the integrated development of agriculture with industry and service industries^[5]. Secondly, the underdeveloped county financial market leads to insufficient guarantee of development factors, prominent problems of financing difficulties and high financing costs, and insufficient vitality of social capital. Enterprises mainly rely on bank loans for financing, but problems such as difficulty in obtaining loans and short loan terms are common. Finally, the development of industrial parks lacks overall planning, and some supporting facilities are only limited to road access, electricity supply, and water supply, with insufficient supporting facilities in financial insurance, enterprise incubation, talent training, etc. Investment promotion focuses on introduction rather than cultivation, resulting in the problem of "attracting but not retaining" enterprises. In summary, although Shaanxi has made achievements in urbanization construction, it still needs to further improve the comprehensive carrying capacity of counties to achieve the goal of high-quality urban-rural integration^[6].

3. Analysis of the Impact Mechanism of Digital Inclusive Finance on the High-Quality Development of County Economies

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3.1 Direct Impact Mechanism

Relying on big data credit investigation and mobile terminal access, digital inclusive finance breaks through the dependence of traditional finance on physical outlets and collateral assets, and incorporates a large number of farmers, individual industrial and commercial households, and start-up enterprises in counties that were previously excluded from the formal credit system into the scope of services. As a result, the credit supply curve shifts overall to the right, and the capital accessibility of micro-subjects in counties is significantly improved in the short term. When financing constraints are relaxed, enterprises can timely update production equipment, expand production capacity, and absorb local labor; agricultural operators can also obtain the necessary funds for purchasing improved seeds, agricultural machinery, and expanding reproduction, thereby directly increasing the total level of county economies and improving resource allocation efficiency^[7]. The capital deepening effect brought about by credit expansion enables marginal "jump-style" improvements in per capita GDP and total factor productivity, providing the primary driving force for the high-quality development of county economies.

3.2 Indirect Impact Mechanism

On the basis of directly injecting funds, digital inclusive finance indirectly stimulates the endogenous growth momentum of counties through three progressive channels. Firstly, the key to unblocking the technological innovation channel lies in the risk control model of "data replacing collateral". Digital platforms use transaction flows, social behaviors, and logistics information to build multi-dimensional credit profiles, which significantly reduces the financing threshold for technology-based small and micro enterprises in the R&D stage and alleviates the inherent "financing gap" problem in innovative activities^[8]. The increase in R&D investment is directly reflected in the growth of the number of patent authorizations and the output value of new products, thereby improving the total factor productivity of counties and realizing the quality transformation of economic development^[9].

Secondly, the simultaneous improvement of technological innovation and capital accessibility creates necessary conditions for the industrial upgrading channel. After obtaining continuous medium and long-term loans, county leading industries—such as intensive processing of agricultural products and characteristic manufacturing—can introduce intelligent production lines and green process equipment to move up the value chain. At the same time, supporting service industries such as cold chain warehousing, e-commerce live broadcasting, and data annotation have rapidly emerged, promoting the transformation of the industrial structure from "dominance of the primary industry" to "integration of the three industries" and completing the efficiency transformation.

Finally, industrial expansion and increased employment activate the consumption expansion channel through the income effect. The sinking of digital credit and mobile payment enables rural residents to smooth intertemporal consumption and release upgraded demands such as education, medical care, and durable goods. The expansion of consumption scale, in turn, stimulates local enterprises to expand supply, forming a mutually promoting cycle of "production-consumption" and providing sustainable demand-side support for the high-quality development of county economies.

4.Path Suggestions for Digital Inclusive Finance to Empower the High-Quality Development of Shaanxi's County Economies

According to the Digital Inclusive Finance Index released by Peking University, the development level of digital inclusive finance in Shaanxi's counties has steadily improved year by year, with initial results. However, there is still a significant gap compared with eastern provinces, and the development is unbalanced among regions. The insufficient development of digital inclusive finance is mainly due to the following four reasons.

Firstly, county financial institutions have limited product innovation capabilities and business approval authority. In addition, the main audience of digital inclusive finance is small in scale and scattered in distribution, making it difficult for county financial institutions in Shaanxi to control risks of products and high service costs, resulting in insufficient effective supply. Secondly, digital inclusive finance has significantly expanded the service scope of traditional finance. As a new product of the development of the financial system, it inevitably faces a certain degree of regulatory lag. The imperfect regulatory system makes its development accompanied by potential risks.

Thirdly, the credit information of farmers and the vast majority of small and micro enterprises in Shaanxi is lacking. When

financial institutions provide services and products to them, information asymmetry caused by the imperfect credit reporting system leads to financial repression.

Finally, digital inclusive finance mainly provides services to the poor, farmers, and small and micro enterprises. Most of these groups are not familiar with the digital inclusive finance model, and their lack of financial knowledge results in low acceptance of digital inclusive finance.

To promote digital inclusive finance to better assist the high-quality development of Shaanxi's county economies and serve rural revitalization, efforts can be made in the following four aspects:

4.1 Improve the Supply Level of Digital Inclusive Finance

The root cause of county financial institutions' "willingness to lend but dare not lend" lies in the upward shift of both product templates and approval authority, resulting in a lack of "suitable tools" to meet the scattered and small-sum financing needs of the agricultural industrial chain. The provincial government should take the lead in establishing three scenario-based laboratories: "Qinling-Bashan Mountains, Guanzhong Plain, and Northern Shaanxi Loess Plateau". Common modules such as satellite remote sensing, warehouse receipt Internet of Things, and carbon sink measurement should be developed into "plug-and-play" components and delegated to county branches. At the same time, county legal persons should be granted independent approval authority for credit loans below 1 million yuan, and asset-backed loans within 5 million yuan should be processed online through "machine scoring + remote face-to-face signing", reducing the approval time from 15 working days to 3 days^[10]. For the first loans issued using the above modules, the provincial finance should provide a risk subsidy of 1% of the loan balance and conduct bulk guarantees with the National Financing Guarantee Fund through the "top-to-top" model, driving the average annual growth rate of county digital inclusive loans to no less than 25%, and truly transforming the "supply shortcoming" into a "growth springboard".

4.2 Improve Digital Inclusive Finance Supervision Measures

The prominent contradiction facing county digital inclusive finance supervision is "chaos when loosened, and stagnation when tightened". Shaanxi should launch the "County Regulatory Sandbox Online Platform" within the framework of the Xi'an National Inclusive Finance Reform Pilot Zone, initially opening 5 types of innovative businesses such as "farmland management right + satellite remote sensing" mortgage loans and "live livestock + intelligent ear tag" pledge loans, with a 12-month safety test period. The platform will real-time capture 4 indicators: loan non-performing rate, complaint rate, leverage ratio, and abnormal capital flow rate. Triggering the red line will automatically suspend the filing of new businesses^[111]. At the same time, a "white list" compensation mechanism should be established to provide a 5% financial interest subsidy for non-performing loans generated during the sandbox period, improving the risk tolerance of grass-roots institutions for agricultural and small micro-loans, and realizing "stable innovation and controllable risks".

4.3 Establish a Digital Inclusive Finance Credit Reporting System

"Lack of information is more terrible than lack of collateral". The provincial government should integrate 42 types of data including public security household registration, agricultural and rural confirmation rights, taxation, e-commerce transactions, and water, electricity, and gas payment to build a provincial-level "Qinxin Tong" county credit information platform. Each farmer household and small and micro enterprise will be assigned a unique 15-digit digital credit code and a credit score ranging from 350 to 850^[12]. For entities that reach grade B or above for the first time, the provincial finance will issue 30BP interest rate vouchers (loan interest subsidies), and the municipal finance will provide 50% guarantee fee subsidies, forming a positive incentive of "good credit-real benefits". At the same time, the "Regulations on County Credit Information in Shaanxi Province" should be issued to clarify the calling rules of "one-time authorization, three-year validity, and on-demand retrieval". It is striving to achieve a credit filing coverage rate of more than 90% within three years, basically eliminating financial repression caused by information asymmetry^[13].

4.4 Popularize Digital Inclusive Finance Knowledge Education

"Unable to use and dare not use" is still the biggest obstacle for rural groups to access digital credit. Counties should install 55-inch interactive screens in 17,000 agricultural information service centers, and launch 30 episodes of scenario dramas in Northern Shaanxi dialect, Guanzhong dialect, and Southern Shaanxi Hakka dialect, explaining "mobile phone withdrawal,

online loan renewal, and anti-fraud formulas" through Qinqiang micro-operas. Two regular "financial night school" live broadcasts should be held every month. For farmers who complete 20 minutes of study and pass a 10-question test, operators will immediately give 2GB data packages, and insurance companies will give 20,000 yuan of accidental injury insurance, forming a "learning-testing-reward" closed loop. A unified "Digital Inclusive Finance Promotion Week" should be held after the autumn harvest, providing 50,000 yuan of provincial promotion funds for excellent cases. It is striving to increase the proportion of active digital inclusive finance users in counties by 20 percentage points within one year, making "willing to use, able to use, and dare to use" a new normal.

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Conflict of Interests

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