

# Analysis and Research on Big Data Investment and Financing of Ceramic Cultural Creative Industry

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## Abstract

Since the supply-side reform was first proposed by the high level of the central government in November 2015, the academic term "supply-side" has become a focus of academic, media and social attention. Supply-side reform is a joint reform of productivity, production relations, and supply and demand. Its essence is a transformation and upgrading of production methods. The production mode determines the consumption mechanism. The reform of the production mode will inevitably cause the change of the consumption mechanism. The use of supply-side reform theory to study the consumption mechanism is the embodiment of fully respecting and using the dialectical relationship between the production mode and the consumption mechanism.

## Keywords

Ceramic culture, creative industry, big data, investment and financing.

## 1. Investment and Financing Status of Jingdezhen Ceramic Culture and Creative Industry

Since ancient times, China's greatest inventions include ceramics that have evolved from ancient pottery. Jingdezhen, which was called Xiping in ancient times, is also known as "Flame City", and its ceramic industry has a long history. Jingdezhen takes the ceramics industry as its foundation. Its history of making porcelain can be traced back to "Xiping Smelting Pottery, which began in the Han Dynasty". It has a history of 2000 years and attracted a large number of international friends to come to learn art. Therefore, due to such a long history of Jingdezhen Ceramics and its exceptionally rich cultural resources, and the rich cultural heritage of ceramics, it is able to give play to the social value of carrying forward urban civilization and the economic value of developing urban productivity. In the Song Dynasty, Jingdezhen Ceramics had a reputation in the world. Only 136 ancient kilns were found in the Nanhe Basin. Its official kiln sites and underground porcelain are the only preserved official kiln sites in the world. Jingdezhen City has sufficient ceramic science and education resources and a large number of talent reserves, which can provide durable human resources support for the development of ceramic culture and creative industries. Jingdezhen City Government promotes the development of ceramic culture and creative industries through a series of incentive measures, such as promulgating a large number of positive policies, encouraging enterprises to innovate independently, and promoting the development of the ceramic industry of ceramics through tourism. At the same time, the relatively well-established ceramics cultural market and the cultural folklore and porcelain-making techniques that have been passed down to date in Jingdezhen have created suitable conditions and an inexhaustible motive force for the development of the ceramics cultural creative industry.

However, although the ceramic culture of Jingdezhen has a long history, it has not developed into an outstanding ceramic cultural creative industry, most of which are in the form of private

workshops, and there are very few large-scale enterprises with well-known names. However, Chaozhou has risen strongly by taking advantage of its huge industrialization advantages, forming a situation just opposite to Jingdezhen. It is worth mentioning that Chaozhou produces daily-use ceramics through modern large-scale production methods, which not only cuts costs to a large extent, but also makes its production capacity greatly exceed Jingdezhen, which still uses manual production methods. At present, the total amount of sanitary ware produced by Chaozhou has accounted for more than half of the national total, with an annual output of more than 34 million pieces, reaching more than half of the total national exports; and the total amount of electronic ceramics it produces each year has reached 120 billion. It accounts for 70% of the total annual production of the country and 50% of the total annual production of the world. The following set of data can better reflect that Jingdezhen's "porcelain boss" status has fallen. In 1995, the scale of Chaozhou's ceramic industry was still the same as that of Jingdezhen's ceramic industry. However, in 2003, the scale of Chaozhou's ceramic industry had far exceeded that of Jingdezhen: Chaozhou's ceramic sales were 11.7 billion yuan, and exports were 645 million US dollars. The annual output value of the ceramic industry alone accounts for 47% of the city's GDP; the annual output value of Jingdezhen ceramics industry is only 2 billion yuan, accounting for only 15% of the city's GDP, which can be described as a huge disparity. In addition, due to Jingdezhen's insufficient protection of ceramic culture, a large number of counterfeit goods flooded the market, destroying the good reputation of Jingdezhen Ceramics.

As Jingdezhen classified the ceramic cultural creative industry as one of the eight strategic emerging industries in the city, Jingdezhen ceramic cultural creative industry ushered in a period of great development. According to relevant data, Jingdezhen ceramic industrial output value reached 16.02 billion yuan in 2010. And in the first half of 2011, it maintained a high-speed growth trend of 11.53 billion yuan, an increase of 50.52% compared with the same period last year. Since 2011, the fast-growing cultural and creative industries have become the "leaders" of the city's eight strategic emerging industries, and have the ability to significantly increase investment growth. From January to August 2011, there were 31 cultural and creative industry projects, with a cumulative investment of 2.645 billion yuan, an increase of 4.7 times year-on-year, accounting for 22.4% of the investment in eight strategic emerging industries, of which 11 projects with a total planned investment of over 100 million yuan were completed. The investment was 1.972 billion yuan, a year-on-year growth rate far exceeding the 4.7 times growth rate of all the cultural and creative industries in the pilot. As far as the investment contribution rate of the cultural and creative industries is concerned, it accounts for 26.6% of the growth contribution rate of investment in emerging industries and 41.2% of the city's fixed asset investment growth contribution rate. At present, Jiangxi Province has listed the two major bases of Jingdezhen Royal Kiln Historical and Cultural Expo Park and Jingdezhen (one is a ceramic culture and creative industry base, and the other is the international prize-winning porcelain research and development base for traditional porcelain making technology) as the top ten strategic provinces. Major engineering projects planned for the development of emerging industries (culture and creativity), and construction has begun. Under the influence of the demonstration of the base, Jingdezhen will continue to invest in the construction of the ceramic cultural creative industry base, and then continue to vigorously develop the cultural industry.

During the "Twelfth Five-Year Plan" period, Jingdezhen will vigorously develop high-tech ceramics and creative industries, make them bigger and stronger; use the pilot cities as national innovative cities and the strategic advantages of jointly building a national ceramic science and technology city to build Industrial clusters; create a group of leading companies in functional ceramics or far-infrared ceramics; reach a sales target of 20 billion yuan after 5 years; reach the

goal of creating 10,000 studios within 5 years or so. The sales of ceramic culture industry reached 50 billion yuan.

At the same time, Jingdezhen relies on two national platforms (one is the National Ceramics Technology City and the other is to host the China Jingdezhen International Ceramics Expo) to build a ceramic cultural and creative industry base and fully develop new concept high-tech ceramics and creativity. The ceramic industry, etc., caused Jingdezhen to fall from the original ranking to the top three in the porcelain-producing area in the country. It has historically owned more than 100 ceramic-scale enterprises and completely completed the reform of all ceramic state-owned enterprises.

In the process of deepening the reform of ceramic state-owned enterprises, Jingdezhen City adopted measures to protect industrial heritage and introduce strategic partners, making full use of the old factory buildings and workshops to make it a new carrier for the development of ceramic culture and creative industries. For example, after the reform of the Sculpture Porcelain Factory, known as the "Jingdezhen Ceramic Cultural and Creative Industry Base," about 200 ceramic creative entities were introduced, which resulted in an annual ceramic industry output value exceeding 30 million yuan; a large-scale creative industry was formed. Workshop groups, self-service workshops for creative works tourists, sculpture and porcelain museum, art college graduates, graduate internship bases, etc. In order to attract potters and related personnel engaged in the ceramics creative industry around the world, special investment promotion areas have been set up, and have been Awarded the title of "Jiangxi Province Service Industry Base". In contrast, Shuguang Porcelain Factory, known as the "Precious Imperial Porcelain R & D Base", has a significant feature of producing royal imperial porcelain, such as the "Kowloon Fair Cup", and the annual ceramic output value is expected to exceed 100 million yuan. At present, the Jianguo Porcelain Factory is planning to build a "Ceramic Culture Creative Park", and plans to build a modern ceramic cultural heritage display and protection area and a primitive hand-crafted royal kiln porcelain production and display area. In addition, the Art Porcelain Factory is not willing to fall behind, planning to create a "primitive ecological" porcelain street (characterized by pastel porcelain) and the "Red Shop" ancient street and other projects.

Jingdezhen, as the world-renowned porcelain capital for thousands of years, has a history of making porcelain for 2000 years. In order to continuously enlarge and strengthen the Jingdezhen ceramic brand, Jingdezhen invests 1 billion yuan and thousands of acres of planned land to promote the ceramic cultural creative industry base project. However, as a world-renowned porcelain-making center, although Jingdezhen has created a large amount of ceramic culture, it has become a typical resource-exhausted city in the country. If Jingdezhen wants to achieve sustainable development, it must transform from a low-level ceramic manufacturing industry to a high-level knowledge economy industry, and form a large ceramic industry pattern that promotes the rapid development of the ceramic industry through the development of high-tech ceramics and ceramic cultural creative industries. The output value of ceramics can exceed 100 billion yuan.

In the process of transformation, Jingdezhen always takes its famous cultural brand—ceramics as the center to protect the traditional excellent hand-made porcelain skills, and regards the creative industry as an important growth point for the development of the ceramic industry. Based on domestic and overseas markets, it has invested 1 billion yuan. Yuan created a world-renowned ceramic cultural and creative industry base to accelerate the speed of urban transformation. The main goal of the ceramic cultural and creative industry base project is to build "five major centers": the first is a world-class ceramic creative design, the second is ceramic cultural tourism, the third is exhibitions and exchanges, and the fourth is antiques and ceramic art. The fifth transaction is creative education and information media.

In order to increase the development of ceramic culture and creative industries, Jingdezhen City formulated the "Plan of Jingdezhen International Ceramic Cultural and Creative Industry Base". The plan decided to focus on Jingdezhen Ceramic Cultural and Creative Industry Center and focus on ceramic cultural and creative enterprises (such as French porcelain, Haha (Nepal, etc.) and sculpture and porcelain factories and other entities as the carrier 's cultural and creative industry base development strategy to achieve the effective integration of the ceramic industry system, pool the cultural and creative industry resources around the world, and promote the goal of vigorous development of creative industry entities, while paying attention to protection The brand and intellectual property rights of Jingdezhen Ceramics make "Jingdezhen" famous all over the world.

In order to extensively attract investment and promote the deep development of cultural and creative industries, Jingdezhen not only actively participated in the construction of the Poyang Lake Ecological Economic Zone project, but also combined cultural industry investment with creative industries, convention and exhibition economy, and state-owned enterprise reform. A major innovation in attracting investment in the cultural industry. Guided by the implementation of the project, the ceramic industry in Jingdezhen has entered a period of joint development of cultural creativity and product manufacturing. At present, Jingdezhen has thousands of ceramic cultural and creative entities, solving the employment problem of thousands of people. The implementation of the "going out" and "introducing" strategic decisions has enabled Jingdezhen to explore a new growth point of economic development-the exhibition economy. The annual porcelain fair in Jingdezhen has become the most complete and most engaged product in the ceramic industry in China. Broadest and highest trading platform. At the 2010 China Ceramic Fair, the number of exhibitors reached 620, with a total domestic trade volume of 702 million yuan, a total foreign trade volume of 116 million US dollars, and on-site transaction value of 22.73 million yuan.

In order to better attract investment in the cultural industry, Jingdezhen City has started work from two aspects. First of all, in terms of industrial policies, in order to build a sustainable development environment of "business-friendly, pro-business, security business, and wealthy business", Jingdezhen has formulated and issued a series of favorable policies and measures on taxation, land, finance and finance. For example, "Implementation Opinions on Deepening the Reform of the Cultural System and Accelerating the Development of Cultural Undertakings and Cultural Industries", "Preferential Policies and Several Regulations on the Development of an Open Economy," and so on. Secondly, in terms of service environment, Jingdezhen City specially opened a green channel for foreign investment and adopted a "one-stop" service method and a "one-single-clearing" charging model, which not only greatly reduced the time limit for license application, but also greatly improved work efficiency. In addition, in order to enable foreign investors to obtain more accurate and convenient information services, Jingdezhen City has also created a special project reserve for investment in cultural industries, and compiled a development manual for the city's cultural industries.

#### Problems in Investment and Financing of Jingdezhen Ceramic Culture and Creative Industry

Although Jingdezhen Ceramics has a long history and has a deep cultural background, the development of its cultural and creative industries is progressing slowly, facing many problems, such as insufficient capital investment, lack of support from financial institutions, too simple investment entities, narrow financing channels, and so on.

##### (1) Insufficient capital investment and lack of support from financial institutions

For capital investment and financing. Although China 's total investment in Jingdezhen 's fixed assets has exceeded 70 million yuan since the reform and opening up, this investment is evenly distributed to more than 80,000 ceramic workers in Jingdezhen, but less than 1,000 yuan. Fixed assets. The total investment in fixed assets of other porcelain-producing areas in China far

exceeds Jingdezhen, reaching 20 times or more. After undergoing the restructuring and bankruptcy of the top ten state-owned porcelain factories, the Jingdezhen ceramic industry was divided into a large number of small workshops based on traditional manual production methods. These small workshops mainly rely on their own social resources for financing, facing many difficulties and costs. High and limited.

For business. Nowadays, a large number of small workshops owned by Jingdezhen City adopt an idyllic management method, which can provide the largest creative space for artists to create high-quality products. However, these small workshops cannot produce large-scale production of products, for example, it often takes at least half a month to produce a good-quality vase. In addition, the owners of many workshop-type enterprises only seek immediate benefits and do not have the idea of large-scale production of ceramic products, which has largely limited the overall development of the ceramic industry in Jingdezhen. At the same time, "the owners of most private ceramic enterprises have a state of being rich and comfortable. They use most of their profits for their own consumption, for buying cars and houses, not for re-production. Therefore, enterprises lack the resources needed for their own development. Funding. These factors combined have caused a shortage of funds for the development of private ceramics. "

For government input. In recent years, the Jingdezhen Municipal Government has paid more and more attention to the investment in ceramic cultural and creative industries. In the first half of 2012, there were 31 cultural and creative industry projects, with a cumulative investment of 2.645 billion yuan, an increase of 4.7 times year-on-year, accounting for eight strategic emerging industries. 22.4% of the investment, of which 11 plans total investment of more than 100 million yuan, completed investment of 1.972 billion yuan, a year-on-year growth rate much faster than all cultural and creative industries 4.7 times the growth rate. The contribution rate of cultural and creative industries to the growth of investment in emerging industries is 26.6%, and the contribution rate to the growth of fixed asset investment in the city is 41.2%. However, compared with other provinces and cities, there is still a considerable gap, which still cannot meet the needs of developing cultural industries.

As the cultural industry is in the early stages of development, it faces many risks. Although the market has a promising future, it has not yet produced a profit record, and the credit situation is unclear, which makes it difficult to introduce conventional financial institutions and it is difficult to be accepted by ordinary financial markets. So either its debt cost is too high or no one wants to provide it.

The important channel for indirect financing of China's cultural and creative industries is to borrow from banks. However, due to the high-risk characteristics of cultural and creative industries, many cultural enterprises cannot raise funds through bank loans. In order to ensure the safe and smooth recovery of loans, China has adopted a series of measures, such as gradually increasing the proportion of guarantees and mortgage loans, and reducing the proportion of credit loans in new bank loans. Although there are a variety of assets that can be used as collateral, such as foundations, buildings, equipment, etc., the most popular collateral for banks is real estate. However, the assets of the cultural and creative industries are usually intangible assets, and it is often difficult to evaluate their value. They have the unique characteristics of high risk, so it is difficult to obtain a bank mortgage. In addition, banks generally prefer large-scale cultural enterprises when selecting loan grantees. This is because they have a sound management mechanism, good credit status, and long-term corporate development plans, and often can obtain government guarantees. The subject's risk is relatively small. This also means that the risk of banks choosing small and medium-sized cultural enterprises as the object of loan is greater, so they will be cautious and cautious when issuing loans to them.

Nowadays, because small and medium-sized private ceramic enterprises in Jingdezhen have difficulty obtaining third-party guarantees, it is difficult to conduct bank financing loans, and it

is even more impossible for banks to issue loans to enterprises that cannot conduct a loan investigation. Therefore, small and medium-sized private ceramic enterprises in Jingdezhen often choose the internal financing method, that is, family financing, and financing through the support of family members. However, ceramic enterprises usually require a large amount of investment and high risks, which can not guarantee the corresponding rate of return, so they may be able to meet their development needs in the early stages of financing. Continue to grow. However, as small and medium-sized cultural enterprises are susceptible to restrictions on loans, and they do not have the strategic vision of accumulating capital, bearing risks, and expanding scale, they will restrict the development of the entire industry at the initial stage of investment.

## (2) Investment subject is too single

Under the conditions of a market economy, one of the main characteristics of investment is the diversification of investment entities. Therefore, as a cultural and creative industry with a large demand for investment, it should form a diversified investment entity. However, the current state of Jingdezhen ceramic culture industry is mainly dependent on government investment, and there are basically no other investment entities. Therefore, such a single investment entity has caused some cultural enterprises transformed from cultural institutions to rely heavily on the government's financial funds, gradually eroding the resilience that the enterprises themselves should have, leading to certain problems in the flow of funds. The forms of private capital and foreign capital as investment subjects have no use and cannot reflect the diversification of investment subjects. Even in recent years, the government has been continuously liberalizing the restrictions on private capital and foreign capital in the cultural and creative industries, which cannot change the status quo that private capital and foreign capital rarely enter the field of cultural industries, mainly for two reasons: First, private capital is affected by traditional cultural concepts; second, folk capital is affected by the high-risk characteristics of cultural and creative industries. Most of the ceramic enterprises in Jingdezhen are small and medium-sized enterprises, and private capital plays its role here. However, due to the limitation of the size of the enterprise and the registered capital, its operating income is not high and the benefits are low. Most cultural companies use workshops as their business model, without corresponding rules and regulations, resulting in relatively scattered and inefficient operations. From the perspective of the entire industry, in Jingdezhen ceramic culture and creative industries, private capital and foreign capital have not yet played its due role.

In fact, the cultural and creative industry is an industry with high investment risks and high returns, but due to its high risk, many companies are discouraged. At present, the ceramic culture and creative industry is still at an immature stage of development, facing many problems, such as imperfect market mechanisms, incomplete industrial value chains, and non-specialized enterprise management. In the initial stage of development, the above problems will consume some capital investment that cannot bring direct economic benefits. Even if this part of the capital investment makes a greater contribution to the overall integrity of the ceramic culture industry, it will make a smaller contribution to the individuality of the enterprise. Faced with such a high level of investment risk, investors must be reluctant to enter. Suggestions for perfecting the investment and financing system of Jingdezhen ceramic culture creative industry

In recent years, although the ceramic culture industry in Jingdezhen City has continued to develop, it still has a large gap compared with big cities such as "North, Shanghai, Guangzhou and Shenzhen". The main reason is that investment and financing issues have been constrained. Its development. According to the investment and financing model experience of the cultural industries in France, Germany, and Japan, the investment and financing system is a system of interaction and interaction including government, financial institutions, creative enterprises,

entrepreneurs, and investors. Therefore, to form a good Jingdezhen ceramic culture industry investment and financing system, we must improve the investment and financing environment, focus on establishing financial institution loans and establish special funds for industrial development, and introduce private capital, that is, under the government investment and financing model as the main body. At the same time, a variety of investment and financing models are used to build a creative investment and financing system for Jingdezhen ceramic culture industry.

#### (1) Focusing on government investment and financing models

Although each industry in our country is a product of a market economy, it is in the government's invisible regulation. Therefore, with the government investment and financing model as the core, the investment and financing environment of Jingdezhen ceramic culture and creative industry can be improved; To improve the legislative support system and loan guarantee system; the government can adjust the corresponding financial support system.

#### 1. Legislative support system to perfect the investment and financing system of Jingdezhen ceramic culture and creative industry through the government

In order to form a good investment and financing system for the Jingdezhen ceramic culture industry, intellectual property protection must be implemented for ceramic cultural creativity. This requires the government to further improve intellectual property-related laws and regulations based on the protection of the "Jingdezhen porcelain" origin, and related The intellectual property system must be able to demonstrate its protection of creativity from the following three aspects: first, it can return ideas and solve non-exclusive issues about creativity; second, it can guarantee a certain rate of return on investment and make resources Attract cultural creativity and seek creative ideas. Finally, expand the scope of creative ideas by encouraging the diffusion of creative ideas and promising rewards. Therefore, implementing intellectual property protection for one idea and fully displaying its characteristics may to some extent lead to another or more ideas. Especially in terms of craft ideas, the success of each idea may trigger technological progress and affect the direction of future technology development.

In order to promote the development of ceramic cultural and creative industries, the first task is to implement the policies related to cultural economy, especially the regulations related to the development of ceramic cultural and creative industries. Second, it is necessary to establish comprehensive intellectual property protection related to ceramic cultural and creative industries. System, at the same time, to protect the achievements of independent innovation intellectual property rights; again, to study the intellectual property rights of ceramic cultural creative industries and formulate protection incentives; finally, while promoting the development of ceramic cultural creative industries intellectual property rights evaluation institutions, The specific behavior of the institution is regulated. Therefore, it is imperative for the government to accelerate the establishment of intellectual property rights in ceramic cultural and creative industries: a sound intellectual property credit guarantee mechanism enables independent innovation intellectual property rights to be implemented and used in the ceramic cultural industry; intellectual property rights can protect and promote the efficient use of ceramic cultural products on trading platforms. Circulation; intellectual property can promote people to create small and medium ceramic cultural enterprises based on ceramic intellectual property and related regulations. In addition, the government can also manage ceramic culture and creative industry trademarks by formulating relevant policies, and regularly compile and publish a list of famous trademarks of ceramic cultural and creative industries in Jingdezhen, severely crack down on and investigate various violations, and strengthen the enforcement of ceramic intellectual property rights. Strength.

## 2. Conclusion:

As the vitality of an enterprise, a brand not only means the integrity of an enterprise, but also reflects the quality of its products. In market competition, the brand is not only a guarantee of product quality, but also a symbol of corporate success. Therefore, if Jingdezhen ceramic culture and creative industry is to become bigger and stronger, it must build a Jingdezhen ceramic brand. Jingdezhen has a variety of ceramic brands, but lacks well-crafted products, and most ceramic enterprises are private enterprises or small and medium-sized enterprises, lacking representative leading companies, which fully shows that Jingdezhen ceramic industry lacks cohesion, which leads to its lack of cohesion. Core competitiveness, so if you want to improve the core competitiveness of Jingdezhen ceramic industry, you need to build Jingdezhen ceramics.

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## References

- [1] Reporter Shi Yisheng of Shenzhen Special Economic Zone. Promoting the supply-side structural reform of cultural and creative industries [N]. Shenzhen Special Economic Zone News, 2017-05-05 (A03).
- [2] Lu Haichao, Yu Fei. Discussion on the Development of Jingdezhen Ceramic Cultural Creative Industry from the Perspective of Consumer Psychology [J]. Commercial Economics Research, 2016, (24): 213-214.
- [3] Song Chong, Cheng Lei. Research on the Integrated Development of Ceramic Cultural Creative Industry in Jingdezhen [J]. Science and Technology Venture Monthly, 2016, (18): 8-10 + 13.
- [4] Tang Yiling, Wang Yanhua. Development of Hunan Ceramic Cultural and Creative Industries under the Background of Industrial Convergence [J]. Popular Literature, 2016, (16): 134.
- [5] Xiao Fan. Impact of the change of consumption concept on the ceramic culture creative industry under the "Belt and Road" [J]. Art Science and Technology, 2016, (06): 122 + 143.