

The Case Study of Inclusive Finance Based on the Big Data Service Platform of Enterprise Financing

–Take “Digital Chongqing · Yukuairong” as an Example

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Abstract—Through the case analysis of the big data financing service platform “Digital Chongqing·Yukuairong”, this paper addresses the main bottlenecks of China’s current inclusive finance, namely the high information collection cost and the information asymmetry caused by the non-circulation of information. Then this paper gives the path of data finance development accordingly. It is recommended to promote high-coverage and high-quality financial services from four perspectives: paying attention to timeliness, accelerating to improve the constraint mechanism and safeguard mechanism, adhering to the principle of equally emphasis on development and safety, and giving full play to the two forces of government and market.

Keywords—*inclusive finance; big data service; enterprise financing; information management*

I. INTRODUCTION

Since the term “inclusive financial sectors” was officially filed by the United Nations in 2005, it has been nearly fifteen years since its concept of “sustainable financial services”, “inclusive development”, “common prosperity” and “people-oriented” received great attention from the society. From the publication of the “Blue Book of Inclusive Financial System” to the present, China has been constantly exploring the practice of inclusive finance and strive to give all groups in the society an equal access to financial services and have the right to credit. However, some problems remain unresolved in the process of development. In recent years, some provinces and municipalities big data bureaus have been established in the country to integrate social information resources and build smart cities and information society. The main purpose is also people-centered, emphasizing user participation and improving social efficiency. The existence of the Big Data Authority can help the “inclusive finance” out of the predicament to help achieve high-coverage and high-quality financial services.

II. THE EXISTING PROBLEMS OF TRADITIONAL INCLUSIVE FINANCIAL PRACTICE

A. *The High Cost of Data Collection Leads to the Inability of Enterprises and Financial Institutions to Achieve Accurate Matching*

From the perspective of private enterprises, in order to meet their own profitability and development needs, enterprises cannot provide sufficient data for financial institutions to conduct effective data analysis, which forms an information asymmetry and information gap. In order to obtain missing data, financial institutions can only rely on relationships to find companies or retrieve purchases on the Internet. The data obtained through this route usually requires a certain amount of data cleaning and standardization processing. This phenomenon leads to excessive data collection costs and too low data credibility. The inability of financial institutions to accurately and efficiently analyze business operations and credit conditions will worsen the difficulty of corporate financing, leading to a further widening of the social gap.

B. *Information is not Circulated, and Data is Difficult to Exert Its Value*

At present, most financial institutions do not form an overall data network. Although various organizations have accumulated a large amount of data in their development process, these data cannot achieve the so-called “big data analysis.” The so-called “big data” does not focus on pursuing the “big” data volume and the “difficult” data acquisition. Instead, it must realize the flow and sharing in the existing data to realize its value and effectively promote innovation. The emergence of financial products and innovative financial services has formed a good ecosystem of big data development and contributed to high-quality financial development. Many of these financial institutions are actually isolated islands of information. In order to carry out the prescribed financing review process, enterprises have to go to different financial institutions several times, submit similar materials repeatedly, and wait for a long time.

Compared with the establishment of data sharing channels between independent financial institutions and other financial

institutions, it is a better choice to directly provide data support for “inclusive finance” by the Big Data Administration because of its extremely high authority and Broad coverage can provide solutions to the above problems.

III. THE BIG DATA SERVICE PLATFORM OF ENTERPRISE FINANCING: TAKING “DIGITAL CHONGQING·YUKUAI RONG” AS AN EXAMPLE

On January 17, 2019, the Chongqing Big Data Service Platform of enterprise financing “Digital Chongqing·Yukuairong”, which was officially launched by the Chongqing Municipal Bureau of Big Data Development. The platform aims to solve the asymmetry of information between banks and enterprises, thereby improving the efficiency of corporate finance. The platform brings together 105 categories, 1242 items and 22 million related enterprises in 26 city-level departmental units. By November 2019, the number of registrations of the platform enterprises was 193,008, the number of financing applications was 218,118, and the amount of financing loans was 1,512.78 million. A total of 4,294,710 data were called. “Yukuairong” realized “a network of financing information, and a database of relevant enterprises”, which promoted the effective docking of banks and enterprises, broadened the financing channels of enterprises, and promoted the financing of private enterprises and micro enterprises on the premise of guaranteeing credit. Its specific advantages are as follows:

A. Using Blockchain Technology to Build a Complete Credit System

In view of the current difficulties in obtaining small and medium-sized enterprise data, and potential default risk, “Yukuairong” innovatively introduces blockchain technology to solve the contradiction between real-time data sharing, authority change and safe use and become a peer-to-peer data interaction channel between government departments and financial institutions to remove third-party organizations. In addition, there is a financing database on the platform behind it, relying on the Chongqing public information resource sharing platform, covering a total of 22 million information on market supervision, taxation, real estate, social security, credit reporting, water and electricity, and so on. Accumulated. Therefore, in this platform, the blockchain is a technical means, and the government information disclosure is data security, and the combination of the two improves the current corporate credit evaluation system.

B. Creating a Closed Data Analysis Environment to Ensure Information Security

Safeguarding information security is one of the top concerns in the era of big data. As a financing platform for all-round information of enterprises, “Yukuairong” relies on the e-government extranet to build a closed and secure big data analysis environment, and obtains enterprise evaluation results in the independent calculation and analysis of the security zone to ensure the core data security.

C. Creating a Portal for Big Data Service Systems to Realize One-stop Financial Services

From the perspective of small and medium-sized enterprises and private enterprises, the big data service platform displays financing-related policies and related financial products, providing enterprises with one-stop financial services to achieve precise integration with financial enterprises. The main functions of the portal are: 1) corporate credit inquiry; 2) financial product promotion; 3) financing channel; 4) policy consultation; Enterprises can obtain comprehensive information services through this function; 5) system management. When an enterprise logs in to the platform, it only needs to use the unified social credit code authentication registration, and the authorizes the platform to use data. From the perspective of financial institutions, financial institutions publish financial products on the platform. After that, the platform will evaluate the combined enterprise data of such products, match the appropriate financial institutions and corresponding financial products for enterprises to choose, and finally realize the accurate docking of the bank and enterprises.

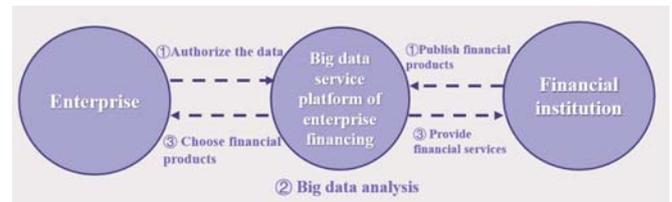


FIGURE I. MATCHING PROCESS BETWEEN ENTERPRISES AND FINANCIAL INSTITUTIONS

IV. THE THINKING OF THE DIFFUSION PATH OF BIG DATA FINANCIAL SERVICES

A. Pay Attention to Timeliness

When time comes out of big data, it becomes an outdated data with no analytical value. Although it is not realistic to make enterprise information as real-time updates as traffic information in smart cities, it should also collect relevant data in a timely manner. At present, most credit information systems and credit platforms are updated once a month. Whether the update frequency can keep up with changes in corporate credit and business conditions is still debatable, and the cost of data collection and analysis needs to be balanced with the value brought by the data. In short, in the face of increasingly compact and intensive lending needs, more time-sensitive data can often lead to more accurate docking of the bank and enterprises and lower risk.

B. Accelerate the Improvement of the Restraint Mechanism and the Guarantee Mechanism

Based on “The Guiding Opinions of the State Council on Accelerating the Construction of a National Integrated Online Government Service Platform” in July 2018 and the “Department of State Council Promotion of Inclusive Financial Development Plan (2016-2020)” in December 2015, the related departments need to clarify the differences and linkages between the traditional financial services and current

innovative financial services. Thus, they can further establish and improve policies and regulations, relax the aspects of excessively strict supervision, and timely fill in the aspects of regulatory gaps in order to constrain and guarantee the normal operation of big data financial services, and create excellent environment for collaborative innovation for data resources.

C. Adhere to the Principle of Equal Emphasis on Development and Safety

Information security is the common cornerstone of the development of enterprises, financial institutions and big data financing service platforms. Once information is leaked or maliciously invaded by others, the consequences will be huge losses, hinder the normal matching between enterprises and financial institutions, and even cause both sides reluctant to interact through the service platform. Therefore, while developing data analysis matching technology, the security of the analysis environment must not be neglected. The closed data analysis environment of “Yukuairong” is a good reference, which guarantees the interests of enterprises and financial institutions and achieves a win-win situation.

D. Increase the Implementation of the Concept of “Big Data + Inclusive Finance” and Give Full Play to the Two Forces of the Government and the Market

“Big Data + Inclusive Finance” emphasizes the promotion of financial industry development through big data. In recent years, big data has greatly changed the way people live and society develop, and the market with increasing demand still has great potential. How to release more of the new dividend of big data and stimulate the new demand of inclusive financial construction is the next question that the relevant government departments should consider. The core goal is to uphold the concept of “Big Data + Inclusive Finance”. The implementation of technology is in place to promote the political, civil and commercial use of big data in a safe, orderly and rapid manner, so that all groups in the society can enjoy the services of inclusive finance in a balanced, safe and effective manner.

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