A Systematic Comparison of Traditional and Emerging Banks

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Abstract. This paper provides a comparative study between traditional banks and Internet banks. Decomposing them into four dimensions (core assets, profit models, service and product design, and operation efficiency), we quantitatively study the key differences. Our findings reveal that traditional banks' competitive capabilities are founded upon core-assets that are tangible in nature (for example, physical branches, deposits, and capital-intensive balance sheets) and therefore, still carry profit models heavily reliant on net interest margin. The emerging banks, meanwhile, possess problem domains poised to leverage intangibles (such as fintech, and service marketing) and therefore have monetised profit models that are more diverse with higher coverage of the 'long-tail'. Such emerging banks have also shown comparatively low per-account costs, quicker product design cycles, and better efficiency than traditional banks. This study not only provides insights into the way in which the banking sector is structurally changing, but also lays the groundwork for digital transformation of traditional banks and sustainable development of emerging banks.

Keywords: Fintech, Profit Model, Operational Efficiency.

1. Introduction

The traditional bank, as the centre of mass of the modern financial system, carries out the capital intermediation, allocation, payment settlement, risk transfer and many other roles essential to modern financial activity. They are the lubricants and stability tools of the economy. For centuries, traditional banks have built impenetrable moats around their businesses in networks physical, personal jurisdiction born out of their vast branch networks, customer bases and rigorous risk control—shaping and changing, for example, the paths of whole countries and of national and international economies. Their cautious, often timid, approach to business has maintained the stability of the financial system and developed the basic mental model of financial services in the minds of their customers.

But as the 21st century arrives, the digital technology wave embodied by mobile Internet, big data, cloud computing and artificial intelligence has swept over the globe, radically transforming the business ecosystem and user behavior. With this backdrop, both supply and demand sides of financial services have been transformed dramatically: on the one hand, users have higher expectations of convenient, inclusive and tailor-made financial experiences; On the other hand, maturity of technology has created the possibility of full-process digitalization of financial business. Regulators around the world, with the desire to improve the quality of the financial services industry and fracture old monopolies, are typically open to technology firms entering the banking sector, leading to the emergence of so-called "challenger banks" and customized digital banking licenses [1]. The development of this supply and demand relationship and the change of the policy environment are exactly the same factors that have together created a new type of banking that is entirely based on the digital world - Internet banks (or digital banks). They do not just represent simple online migrations of traditional enterprises, but instead new forms of monetary organizations that have been entirely reformulated concerning the architecture, product design to service ideas based on financial technology and have put a new spin on the history of the banking business model.

It is against this background that this study purposefully intends to systematically compare compare the traditional banks with the challengers. To dig into the DNA difference and paradigm difference, the paper will appraise their differences along four core dimensions core assets, modes of profit, the Design of Service and Product and operational excellence. It is a real eye-opener through and through into ways that emerging banks attack the existing order, offering highly educative information for market participants including transformation decision-makers in traditional banks and

strategic planners inside emergent banks, and giving regulators theoretical mooring and practical foundation.

2. Comparative Analysis of Traditional and Emerging Banks

The evolution history of the financial industry, to some extent, is a history of the transformation of service forms driven by technology. Entering the 21st century, the technological wave represented by the Internet, big data and artificial intelligence has given rise to a group of emerging forces that challenge the traditional financial order - emerging banks (also often referred to as "Internet banks" or "digital banks"). They are not merely the simple online transformation of traditional financial institutions, but rather new types of financial organizations that demonstrate fundamental differences in multiple dimensions such as core assets, profit models, service processes and product designs, and operational efficiency [2]. This chapter will conduct a systematic comparative analysis of traditional banks and emerging banks around these four aspects.

2.1. Core assets

The core assets of traditional banks are physical and tangible, such as: offline branches all over the world, a huge pool of customer funds, and the reputation and heavy asset balance sheet formed due to long-term credit business. The scale effect and capital strength hold significance in its competitiveness. But this model of resource-consuming interference is a systematic barrier to digital change, too. Research has shown that not every traditional bank is well-informed on digital finance, or simply pursues short-term effects with no digital strategy. Concurrently, they are also facing the challenge of the lack of digital technology skills [3], which makes the transformation of their core assets from "physical" to "digital" full of challenges. New banks, by contrast, have digital and intangible core assets: broad and advanced service platforms, responsive product development engines, intelligent marketing based on user data, and highly attractive user interfaces and experiences [4]. They are not interested in the coverage of physical outlets but are determined to create an efficient and scalable entry point to the digital financial ecosystem. In the global market, the development paths of emerging banks show differentiated characteristics: In mature markets such as Europe and the United States, they mostly provide flexible services for the niche markets left by traditional banks in a "squeeze in" manner. In underdeveloped financial markets such as Africa, innovative models like mobile wallets have rapidly filled the service gap [1]. For instance, WeBank has formulated the "ABCD" (Artificial Intelligence, Blockchain, Cloud Computing, Big Data) fintech strategy and has invested 7% to 10% of its operating income in research and development. The proportion of technical personnel exceeds 50%, demonstrating a strong high-tech attribute [2, 5].

2.2. Profit model

At the level of profit model, the profit model of traditional banks is based on strong financial strength and extensive physical networks, presenting a typical "heavy asset" feature. Its core source of profit is the mature "net interest margin" model, which means making profits by absorbing low-cost deposits and granting high-interest loans, with intermediary business income (such as handling fees, etc.) serving as an important supplement. The smooth operation of this model relies on the stable deposit sources brought by the branches, as well as the traditional risk control system based on collateral and offline investigations. However, the vigorous development of digital finance is severely impacting this model. Empirical research shows that digital finance significantly reduces the profit efficiency of traditional banks by intensifying competition in the banking industry [6]. Due to its light-asset nature and the particularity of the customer base it serves, the profit model of emerging banks presents different characteristics. Although interest spread income remains an important component, they were earlier committed to diversifying their income sources [7]. For instance, in the income structure of WeBank, the net income from handling fees and commissions has remained stable at over 30%, mainly coming from intermediary businesses such as the distribution of wealth

management products and precious metals, thus forming a pattern where interest income and intermediary business income are on par [5]. In addition, through the use of financial technology to achieve uninterrupted operation and significantly reduce operating costs (for instance, the IT operation and maintenance cost for a single account of WeBank is only about 2.2 yuan), it has become possible to serve a large number of small transactions and constitutes an important part of its profit barrier [2]. However, the profit model of emerging banks faces multiple challenges. The main ones include the reliance on interbank liabilities, which has pushed up the cost of funds [8], and the limited income levels of the "long-tail" customer groups that emerging banks mainly serve. For instance, the average annual income of Chime, the largest digital bank in the United States, is significantly lower than the national average [1].

2.3. Service and Design

Firstly, in terms of service processes, there are significant differences in the experiences of account opening, daily use, and problem-solving. Account opening is the first point of contact for users. The traditional account opening model of traditional banks requires users to visit the branch in person, go through the cumbersome process of picking up a number, waiting and counter processing, including filling out a large number of paper forms and on-site identity verification, which often takes hours. Although traditional banks have been vigorously promoting digital transformation in recent years and some businesses now support online pre-application, for the opening of many full-function accounts or complex business, users may still need to verify offline or submit multiple physical proof documents, which constitutes a relatively high initial usage threshold. In contrast, one of the core competencies of emerging banks lies in their fully online and digitalized account opening experience. Users only need a smart phone to remotely complete identity verification and account establishment through biometric verification technologies such as scanning identification documents and facial recognition. Thanks to the automated risk control system, the entire process usually only takes a few minutes to complete and supports 7×24-hour uninterrupted service, completely breaking the time and space limitations of traditional financial services [7]. However, due to regulatory policies (such as the need for offline verification of Class I accounts), there are restrictions on the transfer and consumption limits of accounts opened by Internet banks, which to some extent affects the comprehensiveness of their services [5]. At the daily usage level, the operations of traditional banks mostly rely on physical cards, U-shields or dynamic passwords, with numerous steps involved in operations such as fund transfers. Emerging Bank integrates all functions into an intuitive APP, simplifying the operation process to the extreme. For instance, transfers can be made through a mobile phone number, and the bill is highly visible, striving to be "clear at a glance". When problems arise during use, the differences become even more pronounced: traditional banks rely more on telephone customer service or visiting physical branches. Emerging Bank concentrates on web-based customer service and smart assistants, which react rapidly. Nevertheless, its inability to deal with complex issues and humanized interaction could also be seen as a weakness, due to the absence of offline branches.

Secondly, the logic of product design also embodies some inherent differences between the two. The product system of conventional banks is huge and intricate, encompassing the full life cycle of corporate finance, asset management, credit, cross-border services, etc. Its essence is risk pricing and profit maximization. These products are highly standardized and not personalized. It should be noted that as challenges appear, major traditional banks are building product innovation and customer service capacity by making fundamental changes to their organizational structure. For instance, DBS Bank has achieved a deep integration of business and technology by implementing the "GANDALF" strategy and reorganizing its business and technology platforms. ING Bank of the Netherlands has broken down departmental barriers by establishing "agile tribes" and "teams", significantly enhancing the response speed to customers and the efficiency of product iteration [9]. The product design of emerging banks utilizes big data risk control models to achieve precise risk assessment and credit support for long-tail customer groups that traditional banks find difficult to serve (such as small and micro enterprises and individual businesses without credit records), breaking the constraints of the

"80/20 rule" [2, 5], and launching numerous innovative functions: For instance, the "310" loan model invented by MYBank based on e-commerce data (3-minute application, 1-second fund arrival, and zero manual intervention) has become a model for serving small and micro enterprises [10]. Webank's "Weilidai" has achieved "one-time credit granting and revolving usage". It can complete the credit limit approval in as fast as 5 seconds, with funds arriving within 3 minutes. It calculates interest on a daily basis and allows borrowing and repayment at any time, greatly meeting users' demands for small and flexible funds [5].

2.4. Efficiency level

From the perspective of efficiency, traditional banks and emerging banks show significant differences in "scale efficiency" and "technology-driven efficiency". The efficiency advantage of traditional banks was long built on a vast physical network and capital scale, spreading out operating costs through economies of scale. However, this "heavy asset" model that relies on human resources and physical outlets is increasingly facing efficiency bottlenecks such as an excessively high cost-income ratio and lengthy processes in the digital age. From the perspective of organizational theory, the traditional bureaucratic system has exposed inherent functional disorders such as "high requirements for responsibility determination, delaying the reform process" and "weak correction ability, leading to goal deviation" during its transformation [9]. This has made many of its business processes rely on offline operations, with relatively fragmented links and low service efficiency [2, 4]. In contrast, emerging banks, with their inherent technological genes, have built a "light asset" efficient operation model centered on data-driven. By reshaping business processes with cutting-edge technologies, they have achieved a qualitative leap in operational efficiency. For instance, WeBank has reduced the IT operation and maintenance cost per account to approximately 2.2 yuan through its independently developed distributed banking system, enabling it to maintain highly competitive operating costs while serving over 300 million customers [2]. Mybank has managed to keep the average operating cost of each loan at an astonishing 2.3 yuan, with 2 yuan allocated to technical hardware investment, making it commercially possible to serve the massive, small and fragmented inclusive financial demands [2]. Furthermore, empirical research also shows that emerging banks have an advantage in efficiency driven by technology. Internet banks stand out in terms of pure technical efficiency, and their advanced technological development level is a key advantage for conducting efficient business operations [8]. Feng Sixian and Guo Renjing's research also pointed out that the development of digital finance has significantly enhanced the cost efficiency of the banking industry by promoting bank competition, mainly due to the technology spillover effect and competition effect it brings [6]. However, its initial high R&D investment, the pressure of capital cost caused by reliance on liabilities from peers, and the possible increase in non-performing loan ratio during rapid expansion may all temporarily affect the full exertion of its scale benefits and technological benefits [8, 11].

3. Conclusion

This thesis reveals the fundamental differences between traditional banks and emerging banks through a systematic comparison in four dimensions: core assets, profit models, services and designs, and operational efficiency. The competitive advantage of traditional banks lies in their deep historical legacy, which is manifested in the tangible asset barriers to entry in the form of branches, capital strength and reputation. Although their “heavy asset” model offers all-inclusive and stable services, it has bottlenecks of efficiency like high expense and long process-time. New banks are operating entirely within the digital ecosystem, integrating technology-driven, data intelligence and ultimate user experience as its assets. Lightweight operation, complete online services and accurate risk control models have enabled them to tap into the long-tail market that traditional banks struggle to cover and structural optimization of efficiency and cost achievement. There is a sharp divide between the "heavy assets" and "light assets", as well as "scale efficiency" and "technical efficiency" in service

processes, the product logic and the efficiency paths, which the two put forward together to form the new pattern of diversified competition and evolutionary cooperation in the present banking industry.

Naturally, there are some limitations to this study. The analysis presented in this paper relies primarily on public literature and the general cases, not embracing all the regional markets and types of banks. Furthermore, the quantitative comparative exploration and dynamic transition remains to be insufficient. The future study can also incorporate more empirical data to explore the long-term performance and development trajectories of the two kinds of banks in various regulatory contexts and at various levels of technological advancement.

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