

INTERNET FINANCIAL RISK MANAGEMENT

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Abstract

Better financing, financial management, and information intermediary services are the main objectives of Internet finance. Several aspects of the internet, including payments, cloud computing, social networking, and search engines, are the foundation of this new financial paradigm. It is a newly created financial service with qualities taken from conventional financial services, such as more operational convenience, greater involvement, better collaboration, and increased transparency. Internet finance links the financial industry to the fundamental principles of the Internet, such as decentralization, openness, equality, competitiveness, and competition. The primary distinction between Internet finance and traditional finance lies not only in the many channels each financial organization has employed in its development, but also in the participants' thorough knowledge of the underlying principles of internet cooperation and expansion.

Keywords: *Internet finance; financial services; financial management; traditional finance*

JEL Codes: *G30, G32, G38*

1. Introduction

The Internet has progressively become a part of people's daily lives thanks to the widespread use of computers and mobile smart phones in the twenty-first century. The business model of traditional finance has evolved due to the Internet prevalence. Internet finance, a growing financial model was created.

People can generate significantly more wealth while spending less money thanks to the Internet as a universal financial paradigm. As a result, many people are persuaded to take part in the growing business model that is supporting the explosive growth of this new financial paradigm. However, individuals should not ignore the dangers that are associated with this rapidly expanding industry.

2. Internet Finance

The goal of Internet finance is to provide better financing, financial management, and information intermediary services. Internet finance is an emerging

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financial model that is built on several Internet capabilities, including payments, cloud computing, social networking, and search engines (Key, 2015).

By leveraging Internet technology, Internet finance connects the financial sector with the core values of the Internet, including openness, equality, competition, free choice, and decentralization. As a result, it has altered conventional financial models in ways that have simplified service procedures, reduced transaction costs, and eliminated restrictions. It has improved small, medium, and microbusinesses' and regular investors' access to expert financial information.

The key difference between Internet finance and traditional finance is not only the various media used in the development of each financial company, but also the participants' comprehensive understanding of the fundamentals of Internet cooperation and growth. In the context of Internet finance, information from traditional financial businesses is made more transparent, players engage in more services, financial entities and financial intermediaries can cooperate with greater flexibility, intermediate costs are reduced, and the use of financial instruments is made easier (Guiyang, 2015). Despite being a relatively new business, the benefits of Internet finance have attracted many investors, which has fueled its rapid growth and ongoing improvement. The market's current offerings for Internet financial models mostly consist of online Payment by a Third Party.

Online payments by third parties mainly innovate the payment process. The third party online payment adds a third party to the standard buyer and seller transaction procedure. In the course of the transaction, the buyer pays the third party first and then instructs the seller to deliver the products. The buyer confirms receipt of the items when the vendor releases them.

„The purpose and benefits from this type of payment is lower transaction cost. Internet for example, can substitute the manual work and physical outlets in traditional financial institutions also mobile banking system do not need to support branches or hire staff and counter services (CGAP, 2010)“ (World bank-policy research paper, 2021).

3. Investment and financing by nonbanks.

An innovation in investing and finance techniques is non-banking financing and investment. P2P and crowd-funding are two of its primary subtypes. Peer to Peer, which typically refers to personal to personal funding, is the full name of the P2P concept. Commercial banks no longer act as intermediaries in the P2P paradigm; rather, they act as a conduit for capital transfer. It indicates that financial transactions are made directly between individuals on an online financial platform. This particular model has successfully reduced the cost of financing.

On the P2P online loan market, however, hidden cyber security threats and possibly huge credit risks are mounting. It is due to the lack of a unified monitoring system and ideal credit information examination. Also, the lack of clear norms in

business operations, the lack of unsecured and guaranteed loan channels, and the lack of openness in capital movement information are to blame.

Crowd-funding is a term used to describe a financial model in which individuals, small businesses, or microenterprises with expertise in research and development present their cutting-edge or emerging projects to the capital market in an effort to raise idle funds from the general public. It mostly uses the Internet as a platform to allocate funds. A dual monitoring mode of online application and offline supervision is a feature of the crowd-funding concept. In more detail, the platform operator investigates the borrower's credit and reviews their project once the borrower submits an online application. The data is then sent back to the platform so that it can match the investor with funds that are offered in the form of loans. The fact that the money earned by the model of crowd-funding is given to the agent for management makes it vulnerable to moral hazards and information asymmetry problems.

The majority of third-party consultation platforms and online financial markets are currently included in internet financial portals, which are the Internet's innovation in portals. As seen by the online banking and mobile banking services introduced by several traditional commercial banks, the traditional financial sector has also provided various businesses through the Internet in addition to all these new typical models of Internet finance.

Internet Finance Risk Factors

While investors have benefited greatly from all types of derivatives financial institutions derived from Internet finance, it is important to consider the potential risks associated with this sector of the economy. The financial and internet sectors both have a reputation for being extremely dangerous, therefore their combination has given Internet finance a reputation of carrying several hazards.

The danger of Internet finance, which differs from traditional finance in that there are a large number of market participants, information that is more obscured, short and transit transaction flow, fast and frequent transaction, and other factors, have all greatly increased in complexity.

Risk factors in Internet finance

The major two factors of credit risk in Internet finance are the financial institution and the customer. The conventional financial institution might boost its reputation by providing effective monitoring after receiving certification from reputable organizations. Due to the virtual nature of the Internet, it is a known truth that it is possible for all types of information to be fraudulent and impossible to verify. This can be considered as a significant credit risk for users of online financial institutions.

Furthermore, in order to gain the trust of the financial institution, many consumers frequently fabricate some information when they submit applications for financial services. It is critically necessary for those financial institutions to discover

a mechanism to determine the genuine credibility of customers since they now have no ability to determine whether the information is authentic or not and whether the customer enjoys a high level of credibility or not.

The lack of effective regulatory oversight and the existing state of many regulatory gaps are the main causes of the regulatory risk associated with Internet finance. In many Internet financial institutions, there is currently a widespread problem where the main oversight body is not clearly established, leading to an unclear business segmentation that is not subject to applicable rules and regulations. Additionally, neither the right definitions of the business model and the business attribute of those online financial institutions in laws and regulations that have already been introduced nor any explicit regulation concerning market access and other regulations for online financial institutions exist.

Financial products and services have undergone ongoing modification as a result of the advancement of Internet technology and financial engineering. Internet-based financial organizations have used a huge number of data models and econometric models in their management and operations, which has worsened market liquidity and caused a funding shortfall.

The traditional industries have amassed a comparatively rich experience in avoiding market risks after many years of rapid development and ongoing improvement. As a result, they create a system and industry standard that is largely complete because of the Internet's secretiveness and high level of unpredictability. Because of this, Internet finance companies frequently establish a very high rate of return on capital in order to draw sufficient capital into their businesses. However, they lack the ability to avoid market hazards, which will quickly result in the default risk.

The foundation of internet finance is technology, including computer, network, information, and other technologies. The use of diverse technologies in the creation and delivery of all types of financial services occupies a key role. However, some technological issues could also occur, which would have an impact on how Internet banking functions as different science and technology are applied. The security risks of the system mostly reflect the technical risk of Internet financing. Whether or not computer network technology is used in finance over the Internet is directly tied to the technological risk involved. The TCP/IP protocol's security and the limitations of current encryption technology are the key system security issues.

It is true that relying on computer systems can enable the Internet finance industry to operate successfully. This means that if the encryption technology used when using the computer system is imperfect, the financial data held there will either be destroyed or stolen, and the system terminal may be attacked once a hacker or virus assaults the computer system, which will seriously harm Internet finance. The TCP/IP protocol family, which offers the biggest benefit of a smooth information transfer, is the transmission protocol currently in use. The major problem with it, though, is that

it has a low level of protection, making information and money vulnerable to theft when they are being transferred.

Financial Risk Management on the Internet

The best way to ensure the healthy development is to have comprehensive laws and regulations. Based on the genuine reality of Internet finance, countries need to reform associated laws and regulations, and they should increase the oversight of Internet finance with the support of the law.

Prior to establishing a legal system that includes institutional forms, legal status, business types and scope, qualification requirements, and legal responsibilities, a country must first determine the nature and legal status of Internet finance in its legal forms. In addition, it should add regulatory tools tailored to the Internet finance sector to existing traditional financial-related laws (such as commercial bank law, securities law, bank management supervision legislation, etc.) to complement and improve them.

Last but not least, it should build a fair trading platform for Internet finance as soon as possible, give comprehensive, uniform, and fair trading standards, describe the obligations of the transaction subjects, protect consumer privacy, and ensure that players in Internet finance can have laws and rules to follow.

Real authentication and credit verification are now the only ways for both financial institutions and clients to guarantee a secure transaction. Therefore, nations should create an online credit bank for Internet finance companies and all participants, as well as a credit management system to track the fundamental data and credit history of financial companies, the identities of financial participants and their credit histories for previous transactions. To ensure that all businesses and participants may access the most recent and accurate credit information in the credit bank in accordance with the requirements specified by law, they should grade all businesses and participants and update these ratings in a timely and efficient manner.

The national public security departments should increase their efforts and investments in identifying and combating crimes involving Internet finance, as well as hire individuals with scientific and technological know-how and Internet financial crime detection technology, to enable them to quickly identify potentially fraudulent businesses and take appropriate action.

Industry Self-Regulation for Internet Finance

The Internet is a developing sector that has changed so quickly that no set pattern has yet established. It is frequently insufficient to rely solely on the government's authority for legal supervision because the government agencies have trailed behind in information gathering, the creation of legal frameworks, and the implementation of monitoring. The sector also requires self-discipline management.

Although this type of regulation cannot fundamentally replace the government's official regulatory agency, it does have the advantage of having a more

thorough awareness of the pertinent information and dynamics because the industry organization itself is in the Internet finance. „Countries can therefore promote the formation of more Internet industry associations“ (European Commission. Consumer protection policy, 2022).

„Monitoring and enforcing self-regulations are important parts of the regulatory process. The primary mechanism uses Self-regulation and self-policing as to ensure proper compliance and provide protection and remediation“ (Castro, 2011, p. 4). The regulatory regimes include the development of Industry Self-regulation for Internet Finance.

Examples of self-regulation include:

- 1) private businesses;
- 2) professional bodies' codes of conduct, industry service charters;
- 3) accreditation and complaint handling schemes;
- 4) private institutions regulating themselves;
- 5) introduction by industry participants of an industry-wide regulatory code.

Significant role of the government in encouraging industry self-regulation also has an impact on compliance costs and the flexibility in the coverage of this process (Industry Self-Regulation in Consumer Markets, 2000, p. 5).

Collaboration and oversight amongst online finance companies

The government and industry groups may not be able to perform a meticulous oversight for such a sizable industry because they frequently concentrate on the administration and supervision of the entire industry. Governments and trade groups can so promote and support coordination and oversight among various Internet financial enterprises. Companies in an industry will be able to support the quick and healthy development of the sector if they can work together in a win-win and benign competitive style. The industry's businesses as well as consumers will profit from this. That is to say, Internet finance organizations can send personnel to other businesses so that they can interact with one another, learn from one another, and gain insight into how other businesses manage.

Additionally, mutual supervision is possible. If a business or employee learns that another organization is using dishonest tactics like fraud, they can inform the appropriate government oversight body or trade group and direct the investigator. If it is accurate, the regulatory body must penalize the reported enterprise in accordance with the law and honor the pertinent reporting business or person.

Cybersecurity and the Internet Finance Security System

There are significant security flaws in both the Internet and Internet finance. The possibility that viruses and hackers may infiltrate a network and steal user-stored information, usurp their wealth, and cause them to suffer significant losses serves as proof. For Internet finance to develop healthily and sustainably, network technology security is crucial. However, financial organizations frequently lack knowledge in

network technology research and development (Baur-Yazbeck, Frickenstein & Medine, 2019).

In order to create a reliable and safe database, the government should encourage collaboration between financial firms and scientific and technology industries. Their efforts can pay off by boosting capital investment, as evidenced by the increased ability of hardware devices to thwart hackers and viruses. Additionally, since it is possible that a virus or hacker from outside may attack the network, businesses can cooperate with foreign Internet finance organizations to understand how such companies developed their network security systems. They can then implement similar strategies for their own businesses. In order to prevent the leakage of user privacy information, it is required to strengthen the protection of personal data kept by users and to actively develop key management and Internet encryption technologies (Bowcut, 2021).

Consumer defense

More and more consumers are getting involved in it thanks to the excellent ease it offers. However, not every participant has acquired professional finance expertise. In other words, they are unable to identify and efficiently manage dangers associated with online money. Therefore, the governments need to increase the protection of consumers involved in Internet financing.

In order for participants to conduct business acceptance in accordance with a unified process and to facilitate the management of regulatory agencies, the government must first enact pertinent laws and regulations concerning consumer protection. These laws and regulations should also make clear provisions on information disclosure and the responsibilities of institutions during the transaction process. Second, a specialized platform for consumer inquiries can be created to give customers and supervisors avenues for consultation, information sharing, and knowledge acquisition in order for customers to fully grasp their own demands and make the best financial product choice, it is important to comprehend the characteristics of Internet finance operations and product characteristics. Additionally, by collaborating with workers in the financial business, government agencies can put up both online and offline knowledge instructional activities about Internet finance security. These initiatives enhance public awareness of Internet finance dangers and risk mitigation strategies among regular people.

Training initiatives for internet financial management personnel and staff

The daily operation of Internet finance is regulated by the managerial staff. The managerial skills and attributes of these individuals contribute significantly to how Internet finance typically runs. Governmental organizations must therefore improve professional skill development for Internet financial management. „First and foremost, the nation has to improve the training of practical operational skills and professional financial understanding for financial management staff. Outstanding

employees may be sent abroad for study and exchanges so they can get knowledge about superior and advanced management practices both at home and abroad and develop their own professional management skills“ (Van der Meulen, 2021).

Additionally, it is essential to increase the professional quality of staff members and strengthen their quality education in order to guarantee that they would uphold the law impartially and refrain from misconduct. The success of an organization, and even the growth of the Internet finance sector as a whole, depends on its people. The top Internet finance organizations require the same qualified financial and marketing skills as established financial institutions. Additionally, Internet finance companies require professionals with expertise in risk management and computer science.

It may be more convenient for the business to create and operate its own network security solutions if it has expertise in this area. The Internet financial companies can also send their staff members to organizations with cutting-edge technology both domestically and overseas to train them in pertinent professional skills, assuring a more diverse talent pool.

4. Conclusion

In conclusion, as a response to the current risk factors, the government should strengthen the supervision and collaboration of Internet finance as well as international cooperation. It should also update the laws and regulations relating to Internet finance. The online finance sector should be encouraged to practice self-discipline management in addition to legal oversight. Enterprises should work together and monitor one another while also establishing an Internet finance credit management system, increasing consumer protection for Internet finance, and developing an Internet finance security system to increase network technology security. In the meanwhile, individuals should be informed about money security on the Internet. Additionally, the assessment and evaluation process must be improved, and managers and employees in the Internet financial sector need more training.

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