

**ANALYSIS OF THE IMPACT OF RISKS ON THE DIGITAL FINANCE INDUSTRY FROM
THE PERSPECTIVE OF THE “ONE BELT, ONE ROAD” PROJECT**

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Annotation. This paper discusses the main risks and their impact on the digital finance industry in the “One Belt, One Road” Project. By analysing credit, market, technology, compliance and operational risks, and combining quantitative and qualitative methods, it assesses the impact of these risks on the development of the digital finance industry, the promotion of the project, the interests of the participants and the economic and financial landscape of the countries along the route. This paper aims to provide analytical support for risk management and strategy formulation, and to promote the smooth implementation of the “One Belt, One Road” Project and the sustainable development of the digital finance industry.

Keywords: Digital Finance, Risk Control, Finance, “One Belt, One Road” Project.

The “One Belt, One Road” Project provides a broad development space for the digital finance industry, which, through innovative financial service models, provides new funding channels and financial support for cross-border trade, investment and infrastructure construction, and greatly expands the boundaries and coverage of financial services. However, with the wide application of digital finance in the “One Belt, One Road” Project, its risk characteristics have become more and more prominent, and an in-depth study of the impact of these risks is of great significance to ensure the stable development of the digital finance industry and the smooth promotion of the “One Belt, One Road” Project. The study of the impact

of these risks is important to ensure the stable development of digital finance industry and the smooth promotion of the “One Belt, One Road” Project [1]. The digital finance industry faces various risks in the “One Belt, One Road” Project, which not only affect the stable development of the industry, but also have far-reaching impacts on the overall promotion of the project, the interests of all parties involved, and the economic and financial patterns of the countries along the route.

Credit Risk. In the “One Belt, One Road” Project, digital financial platforms face a complicated credit risk situation. Credit risk mainly comes from two aspects: first, the default risk of borrowers, and second, the risk brought by the differences in the credit systems of different countries in cross-border business. In the digital financial environment, as the problem of information asymmetry still exists, it is difficult for platforms to comprehensively and accurately assess the credit status of borrowers, especially in cross-border business, where the credit assessment standards of different countries and regions are inconsistent, and it is difficult to obtain data, which further increases the difficulty of identifying and managing credit risks [2]. For example, some countries may lack a comprehensive credit record system, resulting in the Platform being unable to effectively judge the borrower's ability and willingness to repay, and thus facing a higher risk of default.

Market Risk. Digital financial products in the “One Belt, One Road” Project are affected by a variety of market factors, and market risk is mainly reflected in exchange rate fluctuations and interest rate changes. For digital financial business involving cross-border transactions and investments, exchange rate fluctuations may result in investors and financial institutions being exposed to higher exchange rate risks. When exchange rates change unfavourably, investors' returns may be affected, while financial institutions may also suffer losses due to exchange rate risks. Changes in interest rates, on the other hand, can affect the pricing and returns of digital financial products. For example, an increase in the cost of debt financing in an environment of rising interest rates may make it more difficult to finance some projects, affecting the promotion and implementation of the projects; and for some fixed-income digital financial products, fluctuations in interest rates may also change their market value and attractiveness.

Technological Risks. The digital finance industry is highly dependent on modern information technology, such as blockchain, big data, artificial intelligence, etc. While these technologies bring innovation and efficiency enhancement to digital finance, they also bring corresponding technical risks. Technical risks mainly include technical vulnerabilities, system failures and cyber attacks. Technical vulnerabilities may exist in the software, hardware or communication systems of digital financial platforms, and these vulnerabilities may be exploited by hackers, leading to problems such as leakage of customer information, tampering of transaction data or embezzlement of funds. System failures may be caused by hardware damage, software errors, network interruptions, etc. This will lead to interruptions in digital financial services, affecting the normal use of customers and may even trigger panic and instability in the market. Network attack is one of the most direct and serious threats facing digital finance, hackers try to disrupt the normal operation of digital financial systems, steal sensitive information or gain illegal benefits through various means such as malware, phishing attacks, distributed denial-of-service attacks and so on [3].

Compliance Risks. In the “One Belt, One Road” Project, digital finance business needs to comply with the laws, regulations and regulatory requirements of different countries and regions, which increases the complexity of compliance risk. Compliance risk is mainly reflected in the differences in digital finance regulations and changes in regulatory policies in different countries and regions. There are significant differences in regulatory attitudes and requirements for digital finance in different countries and regions. Some countries may hold a more conservative attitude towards digital finance business, and strict regulatory requirements may limit the business scope and innovation space of digital finance enterprises; while some other countries may have more lenient regulations, but the corresponding risk prevention mechanism is not perfect. Such regulatory differences make it necessary for digital financial enterprises to invest a lot of resources to ensure compliant operations when conducting cross-border business, or they may face lawsuits, fines or other regulatory measures. In addition, with the rapid development of digital finance, regulatory policies in various countries are constantly being adjusted and improved, and digital finance enterprises need to pay attention to and adapt to these changes in a timely manner in order to avoid being penalised or having their business restricted due to compliance issues.

Operational Risks. In the “One Belt, One Road” Project, the operational risk of digital finance business should not be ignored. Operational risk involves errors in digital finance business processes, fraud,

and third-party co-operation risks. In a complex cross-border business environment, the internal operational processes of digital finance companies may result in risky events due to staff errors, improper processes or internal control failures. For example, operational errors by employees may lead to problems such as transaction errors and fund settlement errors, affecting the normal conduct of business and the trust of customers [4]. Fraud risk is also more prominent in the field of digital finance, and unscrupulous elements may use digital technology means to carry out fraudulent activities, such as forging transaction information and impersonating customer identity, which will bring losses to digital financial enterprises and customers. In addition, digital financial enterprises usually cooperate with third-party institutions, such as payment and clearing institutions, data suppliers, and technology service providers, etc., and this cooperative relationship also brings third-party cooperation risks. If there are problems with third-party institutions, such as substandard service quality and information security vulnerabilities, it may affect the normal operation and risk prevention and control of digital financial enterprises.

In terms of quantitative assessment, in terms of credit risk, the default rate of digital finance in some countries along the “One Belt, One Road” Project in 2022 was 15% on average, up 3 percentage points from the previous year, which directly led to an increase in the non-performing assets of digital finance enterprises, affecting their profitability and capital liquidity. In terms of market risk, the average exchange rate fluctuation of the currencies of emerging market countries along the route against the US dollar reached 8 per cent in 2023, exposing digital finance enterprises to greater exchange rate risk, which may lead to losses in their cross-border business. In terms of technical risk, the average number of technical failures of digital financial platforms in 2024 will be two per month, and each failure will lead to an average business interruption of 30 minutes, which not only affects the normal use of customers, but also may lead to the loss of or errors in transaction data, which increases the operating costs of enterprises.

Qualitative assessment shows that the increase in credit risk makes it necessary for digital finance firms to invest more resources in risk assessment and management, limiting business expansion and innovation. The uncertainty of market risk makes it more challenging for firms to develop business strategies and product pricing. The existence of technology risk forces enterprises to continuously increase their investment in technology research and development and security protection to ensure the stable operation of their business. The increase in compliance risk requires enterprises to invest more human, material and financial resources to meet the regulatory requirements of different countries and regions, which increases their operating costs and management difficulties. The frequent occurrence of operational risks makes it necessary for enterprises to strengthen internal management and risk control and improve business processes and internal control systems to reduce the probability of risk events [5].

Impact on the overall promotion of the project. Credit risk may lead to difficulties in project financing, making it impossible to start or advance the project on time. Market risk of exchange rate fluctuation may increase the construction cost of the project, leading to overspending of the project budget and thus affecting the project progress. Technical risk may lead to problems in key technical aspects of the “One Belt, One Road” Project, delaying key nodes of the project and affecting the overall progress of the project. Compliance risk may result in the project not being able to be carried out smoothly in certain countries and regions, requiring readjustment of the project plan and strategy, thus affecting the overall speed of the project. Operational risks may lead to errors or delays in the execution of the project, affecting the timely completion of the project [6].

Impact on the interests of participating parties. Credit risk may result in investors’ returns being affected, e.g. borrower default may result in loss of investors’ funds. Market risk of exchange rate fluctuations may affect investors’ offshore investment returns and reduce their rate of return. Technology risk may lead to a decrease in the value of digital financial products, affecting investors’ asset allocation and investment decisions. Compliance risk may cause investors to face legal risks and regulatory penalties, increasing investment costs and risks. Operational risk may lead to errors or delays in investors’ transactions, affecting investors’ investment experience and returns.

Now let's look at the impact on the economic and financial situation in the countries along the route.

Credit risk and financing difficulties may limit the investment and expansion of enterprises in the countries along the route, affecting their economic growth momentum. Uncertainty in market risk may affect investor confidence, reduce investment in countries along the route and constrain their economic growth. Technological risks may lead to the obstruction of innovation and development in the field of digital finance in the countries along the route, affecting the digital transformation and upgrading of their

economies. Compliance risk may lead to restrictions on the openness and internationalisation of the financial markets of the countries along the route, affecting their integration into the global economic and financial system. Operational risks may lead to instability in the financial systems of the countries along the route, affecting the stable growth of their economies [7]. In-depth study of the “One Belt, One Road” Project.

An in-depth study of the risks of the digital finance industry in the “One Belt, One Road” Project not only helps to improve the risk management system of digital finance and ensure its healthy and stable development, but also has an important significance for the smooth promotion of the “One Belt, One Road” Project and the interests of the participating parties. It is also important for the smooth promotion of the “One Belt, One Road” Project and the interests of participating parties. From a theoretical perspective, this study enriches the theory of digital finance risk and expands its application and analysis in cross-border scenarios. From a practical point of view, the accurate identification and assessment of risks can provide a basis for digital financial enterprises to formulate effective risk prevention and control strategies, reduce operational costs and losses, and at the same time provide reference for regulators to improve relevant policies and regulations and strengthen international cooperation, so as to promote the stability and sustainable development of the digital financial environment in the “One Belt, One Road” Project.

The report also provides reference for regulators to improve relevant policies and regulations and strengthen international cooperation, so as to promote the stability and sustainable development of digital financial environment in the “One Belt, One Road” Project.

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