



**EXPLORING THE REGULATION OF CRYPTOCURRENCIES IN
CHINA--GLOBAL REGULATION BASED ON
CRYPTOCURRENCY DECENTRALIZATION**

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**AN INDEPENDENT STUDY SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE MASTER'S DEGREE OF BUSINESS
ADMINISTRATION GRADUATE SCHOOL OF BUSINESS
SIAM UNIVERSITY**

2023



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This Independent Study has been Approved as a Partial Fulfillment of the Requirement of International Master of Business Administration in International Business Management

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Siam University, Bangkok, Thailand

Title: Exploring the Regulation of Cryptocurrencies in China - Global Regulation Based on Cryptocurrency Decentralization

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Degree: Master of Business Administration

Major: International Business Management

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..... *12* / *9* / *2017*

ABSTRACT

The purpose of this study is to explore and study the establishment and improvement of China's cryptocurrency anti-money laundering regulatory system by analyzing and summarizing the regulatory methods and policies of various countries for cryptocurrency and drawing on international advanced practices and mature experience, so as to reduce the implied financial risks and protect China's financial security to the maximum extent. There are three main research objectives of this study: 1) To enhance the systemization of China's regulatory approach to cryptocurrencies. 2) Enable China's cryptocurrency regulatory system to effectively reduce the risks of money laundering and terrorist financing. 3) Improve the efficiency of China's cryptocurrency regulatory system. This study adopts qualitative research method, through comparative research and analysis and induction analysis. Social interest theory is adopted as the theoretical support to solve the problem from the aspects of natural monopoly, external effects and incomplete information. In this process, a large number of literatures and economic laws are summarized. It is found that the following improvements should be implemented to achieve the research objectives: 1) Establish industry standards to reduce potential risks from the source. 2) Clarify the application of laws and bring cryptocurrencies into the scope of anti-money laundering regulation. 3) Strengthen international cooperation to prevent and combat cryptocurrency money laundering and 4) improve technology and develop regulatory technical support that matches cryptocurrency trading.

Keywords: cryptographic, digital currency, blockchain, Regulatory mechanisms, anti-money laundering.

ACKNOWLEDGEMENT

First of all, I would like to express my sincere gratitude to Professor Zhang Li and my supervisors for their extensive knowledge, self-discipline and creative spirit. Both of you have had a profound impact on me through your selfless work ethic and creative spirit. Secondly, I would like to thank my fellow students and friends who have given me much help and valuable advice during the writing of my thesis. Finally, I would like to give special thanks to my family for their understanding and support. All in all, thank you for everything you have done for me. I would also like to express my most sincere gratitude to the Dean of the Graduate School. Your excellent leadership has provided me with a great academic environment. I am sincerely grateful to all of you for your support and encouragement.



Declaration

I, Wang Haichao, hereby certify that the work embodied in this independent study entitled “Exploring the Regulation of Cryptocurrencies in China – Global-Regulation Based on the Decentralisation of Cryptocurrencies” is result of original research and has not been submitted for a higher degree to any other university or institution.

王浩超

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Jan 29, 2023



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1. Introduction

1.1 Background and significance of the study

The information revolution that the world is experiencing today has profoundly changed people's production, life, behavior, and social relations, triggering significant changes and even disruptive substitutions in various aspects such as values, production methods, lifestyles, and social relations (Yu, 2020). With the development of the commodity economy and the continuous innovation of financial technology (Fintech), especially the emergence of blockchain, cryptocurrencies, and smart contracts, the form of legal tender that people use daily is likely to change. Against the backdrop of a rapidly growing digital economy, about 70% of the world's countries are focusing on cryptocurrencies. Cryptocurrency, as an application of blockchain 1.0, has the advantages of reducing trust costs and improving transaction efficiency, security, and transparency due to the anonymity of cryptocurrency transactions without geographical restrictions, but it is also easy to be used by money laundering and terrorist financing activities due to its decentralization, anonymity, convenience, and irrevocability, which brings the regulatory challenge of anti-money laundering. The rapid iterative development of cryptocurrencies based on blockchain technology objectively poses substantial challenges to payment security, central bank monetary policy, financial security, and financial system stability. Currently, major central banks around the world are developing cryptocurrencies. Some statistics show that 7 out of 25 central banks plan to launch central bank cryptocurrencies (CBDC), 9 are exploring, 6 have been issued, and 3 are not considering for the time being (Yu, 2020). Some countries have undertaken experimental CBDC projects, such as the Jasper project implemented by the Bank of Canada, the Ubin project by the Monetary Authority of Singapore in collaboration with R3, and Stella, a joint research project between the Bank of Japan and the European Central Bank. The People's Bank of China is highly interested in the development of cryptocurrencies and has now issued digital renminbi and entered the rollout phase. In June 2019, the Financial Action Task Force on Money Laundering (FATF) issued its final AML and CTF regulatory guidance requiring virtual asset service providers (VASPs), including cryptocurrency exchanges. The FATF's guidance has strong implications for Chinese regulators, as the Chinese legislature and judiciary intend to include cryptocurrencies in AML/CTF and recognize their financial attributes and financial risks (Fan, 2021). Cryptocurrencies are receiving attention from several countries and regions, and China should also actively conduct a forward-looking study of the regulatory framework and thoroughly explore the various legal risks that may exist to prevent them before they occur. As a world economic powerhouse, the United States has established a relatively sound regulatory path for cryptocurrencies, and its regulatory experience is worth learning from. In this context, it is necessary to explore and study the establishment of a sound anti-money laundering regulatory system for cryptocurrencies in China by drawing on advanced international practices and mature experiences (Ye, 2019).

1.2 Problems of the study

The regulatory approach to cryptocurrencies in China lacks a systematic approach. At this stage, China adopts an absolute ban on cryptocurrencies, but this does not effectively organize cryptocurrency transactions in China, and it is more difficult to regulate them, and this regulatory approach lacks systematicity and has large loopholes. The existing regulatory system for cryptocurrencies in China is not effective in reducing the risk of money laundering and terrorist financing. Due to the nature of cryptocurrencies, they are highly susceptible to money laundering and terrorist financing and the expected impact of the regulatory system should be studied. China's existing cryptocurrency regulatory system is problematic, with many loopholes and room for unlawful manipulation. The efficiency of the existing cryptocurrency regulatory system in China needs to be improved. The characteristics of cryptocurrencies such as Bitcoin make it significantly more difficult for tax authorities to track their trading activities, which correspondingly increases the cost of tax regulation for tax authorities and becomes an obstacle for tax authorities to effectively and timely regulate their tax activities (Xu, 2020). It should be studied that the regulatory system makes the tracking and monitoring mechanism of cryptocurrencies by Chinese tax authorities relatively weak.

1.3 Objective of the study

The emergence of FinTech or "emerging technology + finance" has brought a comprehensive impact on the classical financial regulatory system formed in the 20th century (Zhao, 2020). With the help of emerging technologies such as the Internet and blockchain, the components of financial products and financial services have been deconstructed and reconstructed, showing decentralization, intelligence, and cross-borderization. As a result, the combination of complex financial products with rapidly iterating and rapidly developing emerging technologies "brings obstacles of ambiguous regulatory objects and unclear regulatory boundaries to the functional departments of executive sector regulation and increases the difficulty of policy differences and time and space mismatch in cross-border cooperative regulation. " Therefore, to cope with the new fintech phenomenon of cryptocurrency, regulators around the world are faced with the problem of regulatory strategy and path selection. This study aims to propose a cryptocurrency regulatory system that is suitable, feasible, and effective for China by analyzing the threats of cryptocurrencies to traditional financial markets, the risk of money laundering due to decentralized transaction methods, cross-border tax evasion and settlement, and other risk points, and drawing on the practical experience of cryptocurrency regulation in major international developed countries.

There are three main objectives of this study research:

1. To enhance the systematicity of China's regulatory approach to cryptocurrencies.
2. To equip China's cryptocurrency regulatory system to effectively reduce the risk of

money laundering and terrorist financing.

3. To improve the efficiency of China's cryptocurrency regulatory system.

1.4 Significance of the study

Blockchain-constructed cryptocurrencies can provide anonymity and pseudonymity to protect privacy while facilitating black industry transactions and providing convenience for money laundering crimes. Illegal elements conduct paperless and anonymous transactions through cryptocurrencies, and transaction results and data are stored in different trading platforms and third-party payment platforms, making the preservation of the evidence chain more difficult to achieve and thus making it difficult for regulators to conduct strong supervision (Fan, 2021). Industry standards for cryptocurrency trading platforms have not yet been established, and legislation and regulation are in the blank stage. The platform operation mechanism system is not sound, information is not transparent, and the risk of service transactions is high, and it may also face risks such as hacking attacks at any time. Constructing a national cryptocurrency tax regulation framework not only has positive significance for building a national cryptocurrency tax regulation mechanism, but also can reduce the risk to the financial system, and can lay a good foundation for future multilateral cooperation in cryptocurrency tax regulation among countries.

1.5 Research limitations

Although cryptocurrencies issued by the Chinese government have been operating in 28 cities on a pilot basis as of 2021, it is undeniable that legal cryptocurrencies are still emerging, and important parts of them have not yet been disclosed to society. The relevant theoretical research is still in its infancy, and the legal regulation of legal cryptocurrencies has not been proposed in the extraterritorial literature I reviewed, and the regulation of cryptocurrencies is mainly through financial laws (Yao, 2018). Therefore, I can only discuss this topic from a macro perspective, drawing on the views of my predecessors, and lacking the depth of theoretical understanding, which makes the research content insufficient.

At present, there is no unified standard on the legal attributes of cryptocurrencies at home and abroad, and domestic cryptocurrencies are strictly regulated by "prohibition". In this study, we will try to make appropriate suggestions for the regulation of cryptocurrencies in China from the advanced regulatory experience of the United Kingdom and the United States. However, further research is needed to determine whether the suggestions made in this study are truly in line with the domestic regulatory situation and whether there are difficulties in the actual operation.

2. Literature Review

2.1 Introduction

First of all, as the digital technology for issuing cryptocurrencies is currently in its infancy and is still inadequate, cryptocurrencies face many risks after issuance, such as the use of cryptocurrencies for money laundering, the lack of protection of personal data information, and the risk of counterfeiting cryptocurrencies. At present, although scholars have put forward their views on these issues in the field of financial regulation, there are still shortcomings in the relevant legislation and no more specific suggestions have been made. Secondly, the legal attributes of cryptocurrencies are not positioned by academics, and no unanimous conclusion has been reached. Finally, although cryptocurrencies are presumed to be digital RMBs, they are not explicitly stated in the current laws, and there are divergent opinions on whether cryptocurrencies have infinite legal repayment like RMBs (Zeng, 2021).

2.2 Literature Review

The theoretical basis of this study is the Social Interest Theory, also known as the market failure theory or public interest theory, which is a type of financial regulation theory first proposed by Keynes. The academic research on cryptocurrencies is divided into three directions. The first direction is to make suggestions for issuing cryptocurrencies from the perspective of finance, for example, Yu (2016) believes that the promotion of cryptocurrencies needs to ensure the stability of the currency value, maintain the cost advantage, and promote the payment function. To meet the above requirements most scholars, believe that the central bank should be the one to issue cryptocurrencies. One of the two articles published by Yao (2018) discusses the positive significance of issuance in terms of the issuance design concept, and the other article analyzes the model and system of cryptocurrency issuance by the central bank of China in terms of operational mechanism, system architecture, and technical architecture. The second direction is a study of the attributes of cryptocurrency issuance from a jurisprudential perspective. For example, Liu (2018) interprets the People's Bank of China Law based on jurisprudence, studies the reasonable distribution of monetary power (profit) and obligations of the central bank, commercial banks, and the public, and systematically analyzes the legal nature and circulation nature of cryptocurrencies. Yang and Chen (2020) argue that legal cryptocurrency is a claim of the central bank, equivalent to paper money in value, and is a payment tool that replaces cash, but it is difficult to have legal reimbursement and is incompatible with the definition of legal tender. The third direction is the study of the legal regulatory system of cryptocurrencies from a jurisprudential perspective. The regulation of cryptocurrencies has gone through a process from the Chinese central bank's identification of private cryptocurrencies as speculative tools that threaten financial security to the Chinese

central bank's decision to study cryptocurrencies; therefore, the regulation of digital goods can be divided into two aspects.

On the one hand, there is the regulation of private cryptocurrencies. Fan (2014) argues that virtual currencies have ambiguous legal status, lack legal regulation of trading platforms, and unprotected legal rights of users, proposes a combination of government regulation and industry self-regulation to achieve the goal of regulating trading platforms, and advocates the establishment of international regulatory cooperation; in another article in 2018, he proposes the definition of legal attributes of virtual currencies and the adoption of corresponding legal regulation of In another article in 2018, he proposed to define the legal attributes of virtual currencies and adopt corresponding legal regulation.

On the other hand, there is the regulation of cryptocurrencies. Some scholars talk about the construction of a regulatory system from the perspective of the regulatory model and regulatory concept. For example, Zhao (2020) analyzes the background of cryptocurrencies, their legal compensability, digitality, and universality, and points out the advantages of cryptocurrencies and the problems in legal regulation. The regulatory concept should balance financial innovation and stability, fairness and security, and focus on data security and privacy protection. The regulatory sandbox model can be adopted to strengthen the cooperation and communication of cryptocurrencies in the international aspect by increasing the scope of regulatory subjects to achieve penetrating regulation. Some scholars talk about the construction of the regulatory system from the perspective of risk prevention and control. For example, there is Liu (2016) introduces legal problems faced by China's central bank in issuing cryptocurrencies from several aspects such as anti-money laundering and personal privacy protection. Wang (2018) argues that the existing regulations are based on the RMB as the object cannot achieve effective regulation, and new regulations should be developed to deal with cryptocurrencies that rely on digital technology to operate. Yu (2020) explores the implications for monetary policy arising from the use of distributed ledger technology and the issues faced after issuance, such as anti-money laundering and the protection of personal data. Other scholars talk about the construction of the regulatory framework from a macro perspective, such as Song (2016), who discusses the construction of a regulatory system for cryptocurrencies in terms of legal protection means, technical standards, regulatory strength, and international cooperation, respectively. From the existing literature, regarding cryptocurrency research, the field of finance mostly studies the issuance of cryptocurrencies from the perspectives of application technology, transaction mode, and future way out. In the field of jurisprudence, on the other hand, by summarizing and sorting out and summarizing a large amount of literature, it is found that the study of the regulatory system of cryptocurrencies in China is an issue that cannot be ignored under the historical conditions of building a "digital society". However, I believe that since cryptocurrency is a new thing that has not yet been officially issued and circulated, there is still something that can be researched on how to build its regulatory system. Therefore, in this study, I will introduce and analyze the basic theories

and legal risks of cryptocurrencies, and discuss how to build a regulatory system for cryptocurrencies in China concerning the regulatory experiences of foreign countries, to contribute to the prevention of risks after the issuance and circulation of cryptocurrencies in China.

2.2.1 Regulatory Path Choice

As a new fintech phenomenon, cryptocurrency regulation is still being explored in countries around the world, and the regulators show a trend of diversification, with some acting as securities regulators and others as central banks, and the introduction of regulatory policies is relatively frequent. By summarizing the development of crypto-digital regulation in the U. S., the establishment of regulators, policies, and enforcement of regulation. Zhao (2020) believes that China should take the U. S. federal securities law as a mirror, and can start with the Securities Act to refine more precise and appropriate regulatory rules and approaches according to the characteristics of cryptocurrencies themselves. Ye (2019), on the other hand, summarizes two paths: one is the interpretive path, and the other one is the legislative path. The interpretive path emphasizes integrating cryptocurrencies into the existing AML system and formulating special AML departmental regulations to clarify the contents of laws and regulations; the legislative path focuses on adopting a comprehensive regulatory approach and formulating a Cryptocurrency Law or a Virtual Currency Law to stipulate the contents of AML.

Reference can be made to the practice in Germany to clarify the attribution of taxable types arising from cryptocurrency transactions through notices or guiding cases from governmental authorities and subsume them under the existing taxation in China. This is beneficial to the stability of China's overall tax system on the one hand, and on the other hand, it can adapt to the rapid development of the cryptocurrency market by flexibly classifying the trading activities of cryptocurrencies such as Bitcoin into the original tax system, so that China's tax system presents openness and inclusiveness (Xu, 2020).

2.2.2 Decentralization of "legislative" institutions

The promulgation of relevant tax policies should be in the form of more flexible "departmental regulations" and "office guidelines" rather than in the form of legislation by the NPC Standing Committee. From the perspective of certainty, NPC legislation tends to be easier for taxpayers to understand and follow, but it will reduce the interpretation space of regulations and increase the cost of taxpayers to learn the regulations, thus greatly reducing their applicability (Xu, 2020). From the perspective of the legislature, tax authorities can issue regulations more quickly than the legislature because they do not need to follow lengthy legislative procedures and can better respond to changing circumstances and react quickly. In addition, tax authorities can receive feedback on issues from taxpayers and law enforcement officials more quickly, and therefore can update regulations more accurately to meet changing

circumstances. Therefore, rather than having the legislature enact laws, the tax authorities should issue regulations on issues related to the tax regulation of cryptocurrencies.

2.2.3 Accurate targeting of regulation

The target of tax authorities' tax regulation of cryptocurrencies should shift from users to intermediaries and third-party reporting platforms (Xu, 2020). Currently, the scale of cryptocurrency transactions is getting larger and larger, and transaction intermediaries are springing up. Because intermediaries and third-party reporting platforms are important nodes to connect users of cryptocurrency transactions, well-functioning intermediaries and third-party reporting platforms will in turn facilitate cryptocurrency users to regulate their transactions, which is a feasible strategy given the current technical challenges.

2.2.4 Establishing Third-Party Reporting Platforms

It makes sense to establish a third-party reporting platform by referring to the practices of countries such as the United States. All taxpayers registered on the platform should undergo due diligence and fill in basic data, while the third-party reporting platform should keep basic data records of all taxpayers. Of course, such data records are not compulsory for the platform to report to the tax authorities. At the request of taxpayers, platform parties are obliged to provide their transaction records to taxpayers, which can help taxpayers to calculate the taxable amount. Thus, the establishment of a third-party reporting platform both facilitates the work of tax authorities and assists them in their supervisory role. Although the principle of fairness requires that all income of taxpayers should be reported, considering the reality of China, taxpayers reporting all data will greatly increase the pressure of examination by tax authorities (Yao & Chen, 2018) To make the reporting information manageable, tax authorities can stipulate that only taxable activities exceeding a preset threshold and taxable activities with suspicious patterns are reported to the tax authorities. Since transaction results and data are stored on different trading platforms and third-party payment platforms, regulatory policies for third-party reporting platforms are central to platform construction. Fan (2021) cites policies for the establishment and regulation of cryptocurrency trading platforms in the EU, the US, and Canada. Cryptocurrency trading platforms in the U. S. are required to register with the Securities and Exchange Commission or seek exemptions; Canada requires bitcoin and cryptocurrency operating companies to enforce customer identification, transaction record keeping, and monitoring funds to report suspicious transactions; and the Japanese government includes virtual currency trading platforms, including bitcoin, in its anti-money laundering regulatory system, adopting a registration system to review and regulate.

2.3 Cryptocurrency Concept, Classification, and Background

2.3.1 Concept and classification of cryptocurrencies

With the development of Internet technology, the use of money in daily life has gradually developed in the direction of virtualization and digitization, and the concepts of virtual currency, electronic money, and cryptocurrency have begun to enter the public eye. At present, as there is no unified definition of cryptocurrency globally, the definition of cryptocurrency varies in different contexts. Among them, cryptocurrency in a narrow sense mainly refers to digital cryptocurrency (Cryptocurrency) that does not require a physical carrier and uses specific cryptographic technology, such as Bitcoin and Ether, while cryptocurrency in a broad sense is equivalent to electronic money and refers to all currencies that exist in electronic form in general. Some cryptocurrencies such as Bitcoin are also referred to as virtual currencies due to their lack of obvious asset backing (Yao, 2018).

From the perspective of the issuer, cryptocurrencies can be divided into fiat currencies and cryptocurrencies. In contrast to fiat cryptocurrencies, cryptocurrencies are not issued by a central bank or monetary authority. Most of the definitions of cryptocurrencies by international organizations also favor the category of cryptocurrencies. The International Monetary Fund (IMF) considers cryptocurrencies to be units of a distributed ledger that have intrinsic value in their own right. The European Central Bank (ECB) defines cryptocurrency in its report as a data representation of value that is not issued by a monetary authority but can be used as a substitute for money in certain circumstances. In its report, the Financial Action Task Force on Money Laundering (FATF) states that cryptocurrency is a digital representation of value that can be used not only for digital transactions but also as a medium of exchange and store of value, but is not recognized by national authorities (Zhao, 2022).

It is not recognized by national authorities. Referring to the above view, the cryptocurrencies studied in this study mainly refer to non-statutory cryptocurrencies based on the underlying blockchain technology, which are not issued by central banks or monetary authorities, and are represented by Bitcoin and Ether.

2.3.2 The development background of cryptocurrencies

The development of cryptocurrencies cannot be separated from the basic support of blockchain technology and the development of modern cryptography. In a nutshell, blockchain is a decentralized shared ledger that combines data in chronological order through cryptographic algorithms. Although blockchain is the underlying technology for cryptocurrencies, academia has yet to define blockchain precisely. Essentially, blockchain is a system that combines several technologies such as distributed bookkeeping, cryptographic algorithms, and peer-to-peer transfers. Blockchain technology enables each user to independently test the validity of the "chain" and the information on the blockchain is updated only when the majority of participants in the system agree. Guided by the nature of the

blockchain itself, the transaction data of cryptocurrencies can effectively guarantee the authenticity of transaction information, which largely solves the trust problem of all parties to a transaction under information asymmetry (Guo, 2016).

With the development of modern cryptography, the research of asymmetric cryptographic algorithms and one-way hash functions (Hash functions) has been enriched, making the practical application of cryptocurrencies possible. By using public keys, private keys, and hash operations, modern cryptography can bypass commercial banks to open accounts and form digital wallets without bank intermediaries. However, how to prevent multiple payments, or "double spending," in the absence of a bank intermediary became a problem for digital wallets to conduct transactions. It wasn't until the advent of Bitcoin that a unique and innovative approach to this problem was proposed. In 2008, Satoshi Nakamoto, the founder of Bitcoin, published a report on the Internet entitled "Bitcoin: A Peer-to-Peer Electronic Cash System", which introduced the concept of a distributed ledger and a new bookkeeping method, called mining, to solve the problem of different people having different bookkeeping standards. In the traditional commercial banking model, traders cannot know information related to transactions other than their own, and only commercial banks have access to all information. But in the bitcoin trading model, all transactions are open and transparent, and every trader can view the ledger and share information. The introduction of Bitcoin led to the rise of a series of cryptocurrencies. In 2013, Ethereum was founded by cryptography enthusiasts and Ethereum is its issuing currency. Compared to bitcoin, Ethereum is considerably faster in terms of transaction speed. Soon, the variety and market size of cryptocurrencies also exploded globally (Zeng, 2021).

2.4 Research Framework

The theoretical basis of this study is the Social Interest Theory, also known as the market failure theory or public interest theory, which is a type of financial regulation theory first proposed by Keynes. The theory is based on the social interest theory, which states that the market is not all-powerful and that free competition and market mechanisms can lead to waste and loss of resources (Xia, 2022). When the market is unfair, inequitable, and inefficient, leading to market failures, the "visible hand" of government must intervene in a measured way to achieve optimal resource allocation through government intervention and to eliminate or correct the market's shortcomings through regulation. The purpose of the "visible hand" of the government intervening in the market is to prevent the occurrence of negative externalities and other undesirable situations to achieve a benevolent, healthy, and orderly development of the overall interests of society (Yao & Chen, 2018). I believe that the theory of societal interest can be theoretical support for the feasibility of building a legal regulatory system for digital currencies in China.

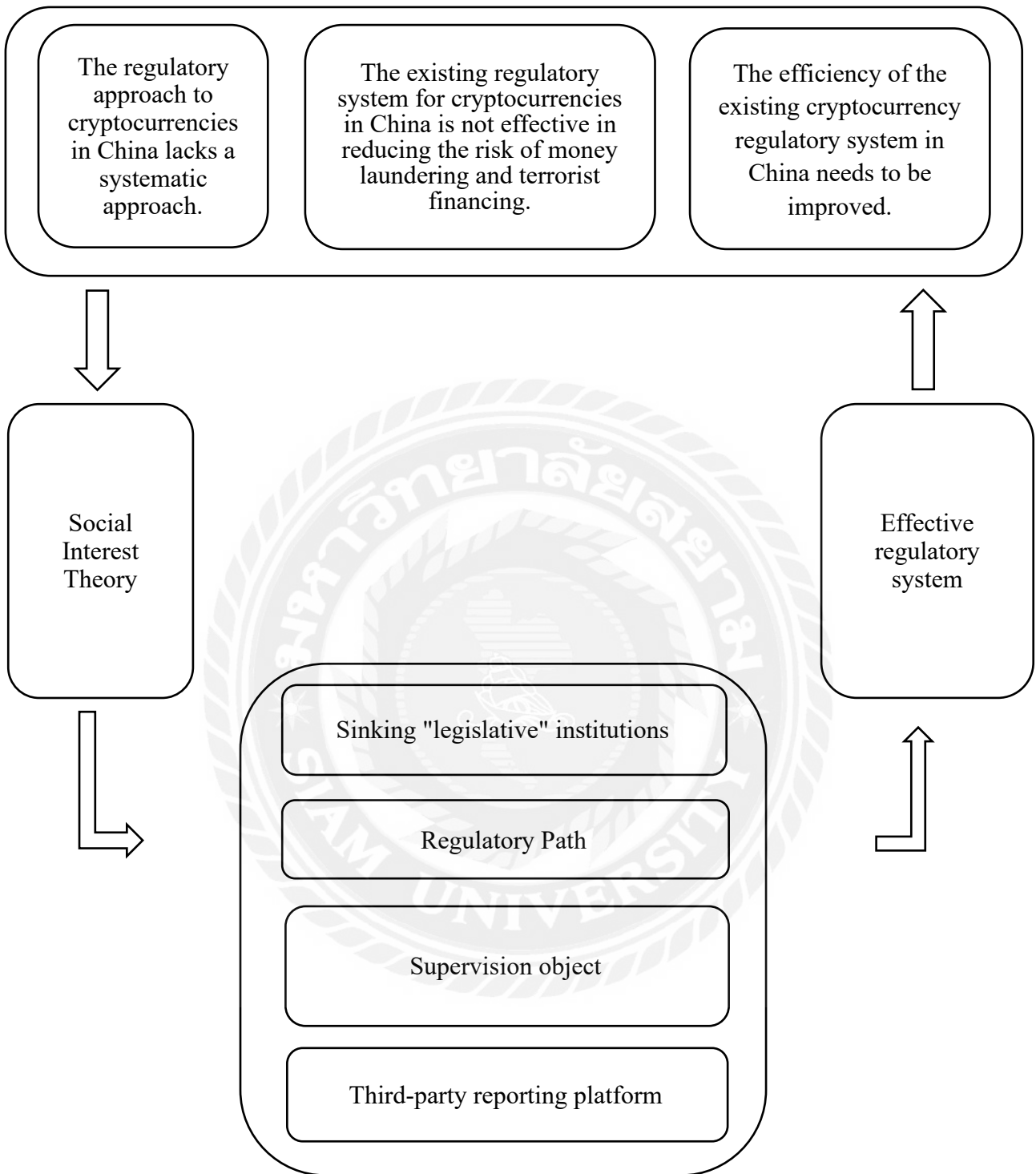


Figure 1: Research Framework

3. Research Methodology

3.1 Choice of Research Methodology

Based on reading articles, this study identifies the use of social interest theory as the theoretical basis. In terms of research methodology, this study adopts a qualitative research approach and analyses through comparative studies and analytical generalizations. The social interest theory focuses on natural monopoly, external effects and information incompleteness to solve the problem, and involves a large amount of literature and economic data summarised.

In particular, a brief analysis of internet cryptocurrency data, combined with the high volatility and fragmentation of cryptocurrencies, enables a more intuitive assessment of the extent of the threat and risk impact of cryptocurrencies on traditional financial markets. This provides a basis for the need for regulatory development and provides benchmark weights for the development of cryptocurrency regulatory policy in China. In addition, by analysing the policies of countries that have already regulated cryptocurrencies, a more accurate characterisation of cryptocurrencies can be made and the regulatory approach in China can be further summarised.

Therefore, based on qualitative research methods and applying social interest theory, this study will explore the issue of cryptocurrency regulation in depth through comparative research and analytical generalisation, and provide strong support for the formulation of relevant policies.

3.1.1 Literature Analysis Methods

In this study, we use a literature analysis approach to conduct an in-depth study of cryptocurrency regulation issues. First, from a financial perspective, we cite Yu (2016), which presents the requirements of cryptocurrency stability, cost advantages and payment functions needed to promote cryptocurrencies. Secondly, from a legal perspective, we cite the studies of Liu (2018) and Yang and Chen (2020) to analyse the legal and circulating nature of cryptocurrencies. We also cite scholars such as Fan (2014) and Zhao (2020) to discuss the regulation of private cryptocurrencies and cryptocurrencies. In addition, we cite studies by Liu (2016), Wang (2018) and Song (2016) to discuss the construction of a regulatory regime for cryptocurrencies from a risk prevention and control and macro perspective. Through a comprehensive analysis of these literature sources, this study will provide a comprehensive and in-depth understanding of cryptocurrency regulatory issues and provide useful references for the formulation of relevant policies and institutions.

3.1.2 Comparative Research Method

By collecting and collating the practices and characteristics of cryptocurrency regulation in countries such as the United States, Japan and Germany, this thesis adopts a comparative

research approach with the aim of summarising the overall regulatory direction and thinking in a relatively scientific manner. The thesis will focus on the selection of regulatory targets and the study of paths, and conduct a comprehensive analysis of the different regulatory practices of each country in order to assess their respective strengths and weaknesses. At the same time, by summarising successful experiences, this study will attempt to draw useful insights from them and provide practical guidance and suggestions for cryptocurrency regulation. By comparing the regulatory practices of cryptocurrencies in different countries, this study will provide useful references for relevant regulators and practitioners regarding the formulation of effective regulatory policies and the regulation of market development.

3.1.3 Analysis and induction method

The reviewed literature is studied and analyzed, and its research contents are summarized and reasonably classified; based on the results of comparative studies and case studies, the effective methods and paths of cryptocurrency regulation outside China are summarized and concluded.

3.2 Analysis of the cryptocurrency regulatory system

The theoretical foundation of this study is the theory of social interest, also known as market failure theory or public interest theory, which was originally proposed by Keynes as a theory of financial regulation. This theory is based on the understanding that markets are not perfect and that free competition and market mechanisms can lead to waste and resource loss. Market failure refers to the inability of market mechanisms to achieve theoretical efficiency and effectiveness.

There are various reasons for market failure, and some common examples include:

Externalities: Market transactions create positive or negative impacts on third parties, but market participants are unable to internalize these external effects through price mechanisms. For example, environmental pollution is a negative externality that can lead to overuse of resources or a decline in social welfare.

Imperfect Competition: When there is monopoly, oligopoly, or monopolistic competition in the market, market participants are unable to achieve optimal resource allocation under conditions of perfect competition. Monopolists may manipulate prices or restrict supply, leading to a decrease in resource allocation efficiency.

Asymmetric Information: In market transactions, buyers and sellers have different levels of information, resulting in information asymmetry. This can lead to market participants being unable to make rational decisions and may even result in the presence of low-quality products or moral hazards.

Public Goods: Public goods have non-excludable and non-rivalrous characteristics, meaning that one person's use does not exclude others, and it is not feasible to charge

individuals through market prices. This leads to the private market being unable to efficiently provide public goods, such as national defense, public health, and infrastructure.

In response to market failures, governments typically take intervention measures to correct market defects, promote efficient resource allocation, and maximize social welfare. These measures may include market regulation, tax policies, incentives, and public policies to guide the market in a better direction and achieve economic and social goals.

3.2.1 Main characteristics of cryptocurrencies

3.2.1.1 Efficient and Convenient

Cryptocurrencies are highly efficient and convenient in daily life and cross-border transactions, promoting the development of inclusive finance (Fan, 2016). In daily life, since the blockchain system based on cryptocurrencies operates based on mathematical algorithms, traders can realize the transactions and payments involved in daily life by simply using electronic terminals in their hands, without the participation of third-party intermediaries. From the perspective of cross-border transactions, in the absence of a unified world currency, traders usually need to exchange currencies before conducting cross-border transactions, which leads to inefficiencies in global transactions, but if traders choose cryptocurrencies as a way to pay for consideration, they can conduct cross-border transactions without the involvement of national settlement institutions and without worrying about the lag of transactions.

3.2.1.2 Low Cost

The transportation and transaction costs of traditional currencies are usually high. In contrast, cryptocurrencies do not rely on physical infrastructure and are relatively cheap in terms of labor costs. At the same time, cryptocurrencies simplify otherwise complex computer processing through blockchain technology, reducing the overhead cost of maintaining data consistency. In terms of transactions, cryptocurrencies enable people without bank accounts to make non-cash payments, which can be a boon to people in countries with poor financial infrastructure. Cryptocurrency transactions do not require fees or other charges to be paid to third-party institutions compared to, for example, regular bank transfers, saving individuals some non-essential costs (Zeng, 2016).

3.2.1.3 Anonymity and Security

While cash, debit cards, credit cards, and other payment instruments in the existing payment system offer a wide range of payment solutions, traditional payments have varying degrees of confidentiality and security limitations. The trust mechanism of cryptocurrencies is based on asymmetric cryptography, and the decentralized distributed bookkeeping technology it uses allows each node to send messages that affect other nodes in the system and record all

transactions in the system (Yao & Chen, 2018). Therefore, all information on cryptocurrency transactions is recorded by the system authentically and without omission, which not only solves the trust problem of both sides of the transaction but also effectively ensures the security of the transaction. At the same time, compared with traditional electronic currencies that require identity verification during the transaction process, the transaction parties of cryptocurrencies can complete the transaction without any third-party institution as an intermediary, enhancing privacy protection (Wu & Chen & Guo, 2018).

3.2.1.4 Transaction Autonomy

Since the global cross-border payment system is mainly based on SWIFT3 and CHIPS3 dominated by developed countries, countries with weak financial development can easily be cut off from the flow of cross-border funds and lose the initiative of financial development once they are subject to unilateral financial sanctions by developed countries (Zhao, 2020). The emergence of cryptocurrencies, in addition to meeting the daily cross-border payment needs of the general public, can partially reduce the impact of financial sanctions on a country's payment system, so that the interests of the general public and small and medium-sized enterprises in countries subject to unilateral sanctions can be relatively protected while preserving the opportunities for the future financial development of the whole country.

3.2.2 Analysis of legal risks of cryptocurrencies

Since cryptocurrencies are the product of financial technology innovation, their issuance and transactions are subject to varying degrees of a legal risk. At the same time, with the arrival of legal cryptocurrencies, the impact on the perceived legality of cryptocurrencies will continue to deepen (Zhao, 2020). This chapter will analyze the legal risks faced by cryptocurrencies specifically from the perspectives of ICO investment and financing, cryptocurrency trading platforms, and anti-money laundering based on the previous analysis of the legal attributes of cryptocurrencies, and analyze the specific impacts brought by legal cryptocurrencies in the context of the research and development process of legal cryptocurrencies.

3.2.2.1 From the perspective of investment and financing of ICOs

In the transition period of China's economic development, a large number of innovative SMEs are playing the role of the mainstay. However, due to China's long-standing "financial suppression", difficulty in financing has become a factor that cannot be ignored in constraining the development of SMEs. Under China's repressive regulatory system, SMEs often have difficulty raising capital effectively to meet the financing requirements of banks and other institutions (Zhu & Chen, 2016). In recent years, the rapid development of fintech innovation has had a significant impact on the traditional financial industry. as an important application of fintech innovation, ICO provides a new financing tool for blockchain startups that are temporarily unable to obtain funds through traditional means. It not only meets the financing

needs of enterprises but also the investment needs of investors for fintech products, with the characteristics of inclusive finance. According to incomplete statistics, as of the first half of 2017, the cumulative financing scale of ICOs in China reached RMB 2.6 billion, and the cumulative number of participants exceeded 100,000 (Zhao, 2020).

Generally speaking, an ICO project is divided into four main steps from project initiation to secondary market trading: (1) The ICO project initiator needs to establish a project receiving account and release a cryptocurrency wallet for investors to check. (2) After investors open the account, they apply for tokens using mainstream cryptocurrencies such as bitcoin and Ethereum within a specified period (Guo, 2016). (3) After the ICO project is listed on the secondary market, token holders enter the market to trade and exit the project by transferring the tokens and gaining revenue in the meantime. In the case of transfers obtained in cryptocurrencies such as Bitcoin, they can also be converted into fiat currency based on the exchange rate of the day. Cryptocurrencies, but to convert into fiat currency usually still have to use cryptocurrencies as intermediaries. However, due to the lack of transparency of many ICO projects with a high return on equity, which is only supported by white papers, there is a serious lack of information disclosure on the use of project funds and project risks, leading most investors to underestimate the investment risks of ICOs and thus invest blindly with an irrational mindset (Xia, 2022).

ICOs are indeed an important means of financing blockchain projects, and their yields are usually high, sometimes raising more than twice the amount of VC investment, but some researchers say that the price of tokens should be determined by the core of the project itself. If the project itself has no real prospects and investors only expect to buy at a low price and sell at a high price, then such speculation loses the meaning that financial innovation should bring. Since ICO as a financial innovation often has a regulatory window and a large moral hazard of the product, it is difficult for traditional regulatory means to effectively obtain regulatory data for regulatory purposes, and regulators are prone to make large floating regulatory measures without access to complete data information (Zeng, 2021).

Due to the uncertainty and instability of the legal regulation of ICO in each country and region, whether the initial token offering is legal and compliant in its country or region depends on the regulatory attitude of each country and region towards ICO. In "financially inhibited" countries, ICO projects may even be considered as illegal issuance of securities, illegal fundraising, and other legally prohibited acts, and investors and financiers may not be able to raise funds due to changes in local laws. Since the value of tokens after an initial token offering is usually unstable in reality, investors often ignore the value of the project itself and are more concerned about whether the tokens they hold will rapidly increase in value and profit (Gao, 2020). However, such motivated sell-offs are likely to cause secondary market volatility again, which makes it easier for regulators to strongly regulate secondary market transactions in ICO projects, again triggering legal risks in the transactions. Especially in countries with strong regulatory attitudes, once regulators gain insight into the nature of ICO projects and realize that the harm brought by the projects themselves is higher than the economic benefits they bring, it

will be easy to bring ICOs to come under the scope of strong regulation (Yao, 2017). In countries with tough regulatory attitudes, once regulators delve into the nature of ICO projects and realize that the harm brought by the projects themselves is higher than the economic benefits they bring, it is easy to bring ICOs into the scope of strong regulation and to scrutinize ICO projects more strictly or even ban them.

3.2.2.2 From the perspective of cryptocurrency trading platforms and anti-money laundering

Cryptocurrency trading platforms not only provide investors with the latest market information but also provide investors with trading services. In terms of the nature of cryptocurrency trading conducted by investors, it can be boiled down to three trading modes: coin trading, fiat trading, and coin-object trading (Wang & Yuan, 2019). Cryptocurrency trading is a transaction in which one or more cryptocurrencies are exchanged with another or more cryptocurrencies in a specific ratio. Through cryptocurrency trading, capital financing can be facilitated, trading platforms can gain revenue from it, and investors can earn the difference and reduce the cost of currency exchange. Fiat currency trading is a transaction in which one or more cryptocurrencies are exchanged for a specific percentage of a country's sovereign currency. Fiat currency trading can facilitate the development of the cryptocurrency market and also help stimulate market dynamics. Cryptocurrency trading, in which a cryptocurrency is exchanged for a product or service offered or specified by the blockchain technology enterprise on which it is based. Investors can directly exchange their holdings of a specific cryptocurrency for a specific product or request a corresponding service. Similar to P2P platforms, the legal compliance of cryptocurrency trading platforms varies by country and region, and changes in the law make the continued existence of the platforms themselves risky. Once a country's laws do not recognize the legality of a cryptocurrency trading platform, the platform will not be able to continue to support trading activities. For example, buying and selling cryptocurrencies between different countries makes it easier to bypass national exchange controls by exchanging different legal currencies with each other. This not only directly leads to huge fluctuations in cryptocurrency trading prices, but also poses a challenge to the monetary sovereignty of countries (Guo, 2016). To maintain foreign exchange stability, some countries require that only state-licensed trading platforms can trade foreign exchange, so platforms that are not qualified to trade in fiat currencies can be banned by regulators for "circumventing foreign exchange controls". In addition, if the platform itself is a party to the trading contract, the contract between the trader and the platform will face legal disputes if the platform "runs away", and courts are not uniform in ruling whether cryptocurrencies are protected by property law. For cryptocurrency holders, there is a risk that cryptocurrencies will not be recognized as property in the legal sense.

In addition, cryptocurrency trading platforms may be used by criminals to launder money. In practice, there are several specific forms of using cryptocurrencies for money laundering

purposes: (1) Criminals directly set up several anonymous accounts independent of their own identity to make cryptocurrency payments and exchanges as investors for money laundering. (2) Using third-party investment funds to establish platforms or using third parties to meet their cryptocurrency transaction requirements. (3) Using the Internet and other technical means to control legitimate accounts for cryptocurrency transactions. (4) Criminals conspire with cryptocurrency platform operators or investors to conduct money laundering activities. Compared to traditional money laundering activities, cryptocurrency money laundering is less expensive and more profitable. The bookkeeping model of cryptocurrencies makes it difficult to identify the true identity of traders, and the financial innovation represented by ICOs has the risk of scenario agnosticism, which makes it impossible for established regulators to collect effective regulatory data, thus again increasing the concealment of money laundering crimes (Liu, 2018).

In addition, the cross-border transaction characteristics of cryptocurrencies make it more difficult to restrain money laundering activities. Since it is difficult for Chinese regulators to track the regulatory means of cryptocurrency money laundering outside of China, money laundering criminals can use areas with relatively weak regulation to carry out cross-border money laundering activities and use the regulatory authorities of different countries to realize the transfer of funds from different regions, increasing the difficulty of national anti-money laundering regulation (Cai, 2015).

3.2.2.3 Impact of Legal Cryptocurrency

Since the introduction of Bitcoin, central banks have begun to explore the path of legal cryptocurrencies. In 2016 alone, the Bank of England began discussing the possibility of a cryptocurrency being issued by a central bank. Soon after, the Reserve Bank of Australia followed suit with a proposal to fully issue an Australian dollar cryptocurrency. The Blockchain Consortium (R3CEV), along with the Bank of Canada, the Canadian Payments Bank, and six Canadian private banks, launched a legal cryptocurrency project called Jasper, which aims to make large payments easier by issuing legal cryptocurrencies (Guo, 2016). At the end of the same year, the Monetary Authority of Singapore (MAS) announced the launch of a project called Ubin and joined forces with several financial institutions, including R3CEV and HSBC, to use the underlying blockchain technology for interbank legal cryptocurrency clearing. " In the second half of 2018, the Bank for International Settlements conducted a study on the development of legal cryptocurrencies at 63 central banks around the world, which revealed that concerns about payment security, payment efficiency, and financial stability were the main motivations for countries to conduct legal cryptocurrency research (Zhang & Niu, 2018). However, while many central banks around the world are researching legal cryptocurrencies, most are still only at the conceptual stage, with only a few countries planning to launch legal cryptocurrencies in the short or medium term.

3.2.3 Status and Difficulties of Cryptocurrency Regulation in China

At present, the legal positioning of cryptocurrencies in China is not clear, the regulation of ICO investment and financing and cryptocurrency trading platforms is in a "no-go zone", and there is no uniform judgment on the outcome of cryptocurrency disputes by the judiciary. Coupled with the research and development process of legal cryptocurrencies by China's central bank, it will take a longer time for cryptocurrencies to settle down under the current boom of legal cryptocurrencies (Zhou & Li, 2018). This chapter will reflect on the current regulatory dilemma faced by Chinese cryptocurrencies by combing through the legal documents issued by Chinese regulators on cryptocurrency regulation and taking into account the situation of Chinese cryptocurrencies and the current status of regulation.

3.2.4 The current situation and regulatory status of cryptocurrencies in China

3.2.4.1 Regulators' views on cryptocurrencies

Although institutions such as the Institute of Cryptocurrency Research of the Central Bank of China have conducted in-depth research on the development and regulation of legal cryptocurrencies, the regulatory policy on cryptocurrencies is strictly controlled. In December 2013, five ministries led by the Central Bank jointly issued the Notice on Preventing the Risks of Bitcoin (hereinafter referred to as the Notice of the Five Ministries), which characterizes Bitcoin as only a specific Bitcoin a virtual commodity. Since bitcoin is not issued by the monetary authority, it does not have the same legal status as currency and cannot be used as currency in the marketplace (Yao, 2018). At the same time, the Notice from the five ministries also cautions financial institutions not to provide other Bitcoin-related services directly or indirectly to their customers, including neither pricing Bitcoin products or services nor buying and selling Bitcoin, and relevant institutions not to include Bitcoin in their insurance liabilities in terms of underwriting.

In early January 2017, the People's Bank of China investigated two major bitcoin trading platforms, "Hotcoin" and "Coin Bank", followed by nine other platforms engaged in bitcoin trading, including "Bitcoin Trading Network" (Wang & Yuan, 2019). The People's Bank of China interviewed the heads of nine other bitcoin trading platforms, including "Bitcoin Trading Network", and concluded that the leveraged transactions conducted by these platforms had a significant impact on market price fluctuations and did not establish an anti-money laundering internal control system as required. After pointing out the problems of the bitcoin trading platforms, it also reminded social investors of the legal risks of bitcoin and its trading platform, as well as the policy risks of national regulation in this field, and called on investors to face bitcoin investments with caution and pay attention to the potential risks arising from the use of leverage operations by the platforms. 2021 In May, with the soaring and plummeting prices of bitcoin and other cryptocurrencies, the China Internet Finance Association, China Banking Association, and China Payment Clearing Association issued the Notice on Preventing the Risk of Speculation in Virtual Currency Transactions, which once again explicitly ordered financial

institutions, payment institutions, and others not to conduct cryptocurrency-related businesses and called on consumers to raise their awareness of risk prevention and beware of loss of property and rights (Zhang & Niu, 2018).

3.2.4.2 Regulatory Measures for ICOs by Regulators

Based on the characterization of Bitcoin, China immediately began to take a series of regulatory measures on ICOs.

On August 30, 2017, the Internet Finance Association of China issued a document reminding investors not to easily believe the misleading propaganda of some unscrupulous institutions to avoid falling into the trap (Yang & Chen, 2018). On September 2, 2017, the Office of the Leading Group for Special Rectification of Internet Finance Risks issued a notice to all provincial and municipal financial offices (bureaus), listing a reference list of 60 ICO platforms in China and requiring local rectification offices to On September 4, 2017, seven ministries and commissions led by the Central Bank jointly issued the Announcement on Preventing the Risks of Token Issuance and Financing (hereinafter referred to as the Announcement of the Seven Ministries and Commissions), which characterized ICO as a kind of unapproved illegal public financing, suspected of illegal issuance of securities, illegal fundraising, and other illegal and criminal activities, and directly stipulated that no organization or individual shall illegally engage in ICO activities. The document also directly states that no organization or individual shall illegally engage in ICO activities, formally indicating that Chinese regulators have a completely negative attitude toward the legality of ICOs. At the same time, the document also imposes a "full-caliber ban" on Chinese cryptocurrency trading platforms, stipulating that cryptocurrency trading platforms shall not engage in the business of exchanging legal tender with cryptocurrencies, nor shall they provide pricing, information, and other intermediary services for cryptocurrencies. During the same period, the world has not seen such serious regulation of cryptocurrencies. Within just a few days of the seven ministries' announcement, the total market value of global cryptocurrencies fell by more than a third. The cryptocurrency business in China is largely banned at the legal level, and some cryptocurrency trading platforms with an industrial base have had to choose to go overseas and rebuild their platforms in countries or regions with more lax regulations (Zhao, 2022).

Some cryptocurrency trading platforms with an industrial base have had to go overseas and rebuild their platforms in countries or regions with less stringent regulations. Amid this tough regulatory stance, regulators led by the central bank jointly issued a document in August 2018.

The document re-emphasized the need to prevent the illegal issuance of securities, speculation on illegal fundraising with the help of blockchain concepts, and other criminal acts while paying special attention to the different new models arising from the development of cryptocurrencies. Shortly after the release of the document, the China Internet Finance Reporting Information Platform included ICOs in the "Internet Finance Reporting Scope" and

encouraged the public to report ICO projects that have not been dissolved by the private sector or for financial fraud (Yang & Chen, 2022).

3.2.5 Reflections on the regulatory dilemma of cryptocurrencies in China

Although the innovations brought by fintech are conducive to expanding and improving the efficiency of capital circulation, they do not essentially change the inherent risks of finance. Compared with traditional paper and credit currencies, cryptocurrencies issued and traded using blockchain technology are more like virtualized value symbols. For example, after ICO projects are issued, the intrinsic value basis of such security-based cryptocurrencies with obvious investment properties is often difficult to measure, and price matching when the intrinsic value is not difficult to measure is undoubtedly impulsive and dangerous, which is not very consistent with the traditional economic theory that value is the basis of price (Zhou & Li, 2018). Most countries around the world are wary of ICOs because they are concerned about this new measure of value. On this basis, financial rules under the traditional financial regulation paradigm are usually the product of "crisis regulation", and although command regulation is the main tool and has achieved some success, it is often difficult to cope with the impact of increasingly innovative fintech on traditional markets. At present, China's regulation of fintech has not fully kept pace with fintech innovation, and can only respond to the financial market in the context of fintech with the traditional regulatory system (Zhou & Li, 2018).

Taking the announcement of the seven ministries and commissions as an example, the regulator only generally characterizes ICOs as unauthorized illegal public financing, without explaining the legal attributes of cryptocurrencies, forms of capital raising, and promises of benefit returns, lacking jurisprudential explanations, and still prohibiting the act in a simple imperative manner, leading judges to interpret each specific case differently when making judicial decisions (Yang, 2018). This results in judges interpreting each case differently when making judicial decisions. While simple imperative regulatory measures can reduce some of the negative effects of financial innovation, they are still fundamentally a study of the risks posed by fintech. In the age of fintech, cryptocurrencies are growing rapidly due to their inherent characteristics that meet the needs of rational people for quality market products. Therefore, the regulation of cryptocurrencies should not simply be rejected and denied but should explore the logic behind their development and regulatory strategies. Currently, Chinese regulators still prohibit the issuance and circulation of cryptocurrencies on the grounds of traditional financial fraud or incompatibility with traditional securities issuance, which in turn suppresses the otherwise healthy developmental dynamics of cryptocurrencies, thus tending toward speculative financial fraud (Zhang, 2019).

Compared to foreign countries, the rise of cryptocurrencies in China is to some extent caused by relying on sentimental psychology, which itself reflects the general public's curiosity or blind obedience to fintech products. Although China has officially adopted a "full-caliber ban" on cryptocurrency trading platforms, the policy has not been well enforced. Instead, due

to the lack of active legal guidance, many fraudulent ICO variants, especially in China's second and third-tier cities and even remote villages and towns, are looking for opportunities to plunder investors' funds. Meanwhile, cryptocurrency trading platforms have been repeatedly banned under the current prohibitive policies (Zhang, 2019). These platforms are not guided by government agencies or industry associations and do not even have the basic safeguards to maintain their trading systems. As a result, many platforms do not work from the perspective of protecting the interests of investors, but simply take advantage of the general public's lack of awareness of financial risks and profit from investors' speculative mindset. It is worth noting that merely banning ICOs without trying to meet the essential need for corporate financing difficulties will still lead to unmet legitimate financing needs of companies. If enterprises are unable to meet the financing needs of ordinary financial channels such as banks, they will look for new channels, which will easily trigger a demand-oriented "regulatory gap" and thus make it more difficult for regulators to implement regulatory measures (Wang & Yuan, 2019). Therefore, some scholars suggest that qualifying and regulating the cryptocurrencies involved in eligible ICOs as securities could instead allow the integration of fintech products into a more regulated market. This would allow for orderly regulation and change the current "one-size-fits-all" approach of simply banning ICOs, which could be the best of both worlds.

Financial regulation and financial innovation often face a game between regulators and regulatory targets. After the release of the Announcement by the seven ministries and commissions, the Chinese cryptocurrency market shook violently, and then the regulators issued new "prohibitive" regulatory information, but the dampening effect on the market has diminished and the regulatory policy has not been as volatile as before. The current state of cryptocurrency regulation in China is a joint game of market and legal regulation, and the influence of purely "prohibitive" legal regulation is becoming weaker and weaker as the global cryptocurrency wave pulls in.

From a market economy perspective, when market demand conflicts with regulatory policy, market demand does not wane, but rather looks for other paths to break through (Yang & Ma, 2019). From the timeline of Chinese corporate financing, from the initial equity crowdfunding forced to stop due to abnormal stock market fluctuations to the crackdown on the barbaric development of ICO to the "going out" of cryptocurrency trading platforms and the emergence of STO (Security Token Offer), we can see that the objective demand for financial development is not simply bound by regulatory policies, but is constantly seeking new ways to break through the regulation. Facing this situation, regulators need to fully understand and analyze the role of FinTech innovation in the development of China's financial market, rather than simply implementing a "blocking-based" regulatory strategy, otherwise, they may be overwhelmed by new financial models and consume a lot of avoidable regulatory costs.

Faced with the current situation, if Chinese regulators continue to ban the issuance and trading of cryptocurrencies as a regulatory policy to maintain financial security, not only will

they fail to effectively control the financial risks posed by cryptocurrencies and protect the legitimate rights and interests of investors, but they may also put China at a disadvantage in the global competition of the digital economy. Instead of adopting a "one-size-fits-all" regulatory strategy for cryptocurrencies, it would be better to formally incorporate cryptocurrencies into the regulatory scope to facilitate the fight against existing illegal and criminal acts, while satisfying the financing needs of financiers and protecting the legitimate rights and interests of investors.

3.2.6 Selected national cryptocurrency regulatory systems effectively reduce the risk of money laundering and terrorist financing.

On January 4, 2023, Coinbase (ticker: COIN), a U. S. -listed cryptocurrency exchange, will pay a \$50 million fine to the New York State Department of Financial Services (NYDFS) to settle charges that it allowed users to open accounts without conducting adequate background checks. The regulator found that the cryptocurrency exchange's policies violated anti-money laundering laws. The settlement agreement also requires Coinbase to invest \$50 million over the next two years to strengthen its compliance program. Adrienne A. Harris, director of financial services for the New York State Department of Financial Services, revealed in a press release that Coinbase was fined for its violations of New York banking laws and the New York State Department's compliance program and that the investigation revealed that Coinbase allegedly violated financial services (DFS) virtual currency, money transmitter, transaction monitoring, and cybersecurity regulations, among other areas. These issues leave the Coinbase platform vulnerable to serious criminal conduct, including but not limited to fraud, possible money laundering, alleged activities related to child sexual abuse material, and potential drug smuggling (Cai, 2015).

The Norwegian National Authority for Investigation and Prosecution of Economic and Environmental Crime (Økokrim) arrested the largest perpetrator of crypto theft in connection with the Axie Infinity hack in March 2022. During the operation, the hackers managed to break into more than 60 million kroner of cryptocurrency on Axie-saka, the largest hack in Axie Infinity to date (Cai, 2015). Through cooperation with the FBI, Økokrim managed to identify and arrest the perpetrators in connection with the North Korean hacking group Lazarus. In addition to the successful return of \$5. 9 million, the arrest increased the value of the AXS and RON tokens by 8% and 10% respectively. The theft took place in March 2022 when hackers robbed Axie Infinity's hosting network, the Ronin network. They managed to break into the network and stole \$625 million (about Rp 9. 5 trillion) worth of crypto assets, including 174,000 ETH and \$26 million.

3.2.7 The case for establishing a cryptocurrency regulatory system to increase tax revenue

In June 2021, the government of Gyeonggi Province in South Korea, which is responsible for managing the Seoul area, announced that it had confiscated close to 53 billion won

(approximately \$47 million) of cryptocurrency assets such as Bitcoin and Ether from a total of 12,000 people in a month-long tax evasion investigation. Among the 12,000 people who evaded taxes through cryptocurrencies, including a "famous TV shopping channel host" who owed 20 million won in taxes while owning more than 500 million won worth of other crypto assets such as Ether; a doctor who owed 17 million won in taxes while holding 2.8 billion won worth of Bitcoin; and another who owned 30 houses. Another individual who owns 30 homes owes 30 million won in income tax while owning 1.1 billion won worth of bitcoin.

4. Results of the study

By analysing the threats posed by cryptocurrencies to traditional financial markets and the risks of money laundering, cross-border tax evasion and settlement that may be brought about by decentralised trading methods, and by combining the practical experience of cryptocurrency regulation in internationally developed countries, a feasible and effective cryptocurrency regulatory system suitable for China's national conditions has been successfully proposed.

In this study, we take the analysis of the threats posed by cryptocurrencies to traditional financial markets as a starting point and delve into potential risk points such as money laundering risks, cross-border tax evasion and settlement that may arise from decentralised trading methods. At the same time, we draw on the practical experience of major international developed countries in the regulation of cryptocurrencies, with the aim of proposing a feasible and effective regulatory system for cryptocurrencies that is suitable for China's national conditions.

First, we conducted an in-depth study of the operational mechanisms of cryptocurrencies and investigated their potential threats to traditional financial markets. By analysing the anonymity and decentralised nature of cryptocurrencies, we reveal the challenges that may be posed by issues such as money laundering risks, cross-border tax evasion and settlement.

Secondly, we have collected and compared extensively the practical experiences of major international developed countries in the regulation of cryptocurrencies. By studying the regulatory frameworks, policy measures and laws and regulations of these countries, we gained an understanding of their successful experiences and lessons learned in managing cryptocurrency risks.

On this basis, we have proposed a cryptocurrency regulatory system suitable for China, taking into account the characteristics and needs of the domestic financial market in light of China's national conditions. We emphasise the importance of systematic regulation and enhance the systemic nature of China's approach to cryptocurrency regulation by ensuring that the regulatory system is comprehensive and coordinated. In addition, we focus on addressing money laundering and terrorist financing risks and ensuring the security and compliance of cryptocurrency transactions to reduce the impact of potential risks on the financial system.

Finally, we make recommendations to improve regulatory efficiency in order to promote sustainable development and innovation in the cryptocurrency industry.

Through the whole study process, we systematically analyse the key issues of cryptocurrency regulation and propose solutions suitable for China based on international experience. This research process is important for understanding the risks and challenges of cryptocurrencies, and for building an effective regulatory system. We hope that this study will provide useful reference and guidance for the development of cryptocurrency regulation in China and promote the stability and sustainable development of the financial system.

4.1 Implication for the tax regulation policy of cryptocurrencies in various countries from the perspective of comparative research method

As mentioned above, there is no consensus on the attitude toward tax regulation of cryptocurrencies such as Bitcoin in countries around the world. However, the exploration, practice, and policies of some countries on the tax regulation of cryptocurrencies, as well as the attitudes adopted, have certain implications for the tax regulation of cryptocurrencies in China. The author has searched and summarized the cryptocurrency tax regulation policies of various countries, and selected some countries with typical significance for analysis.

4.1.1 The United States

In 2013, the U. S. Financial Crimes Enforcement Network (FinCEN) made it clear that those involved in virtual currency transactions need to register and enforce the Bank Secrecy Act. In 2015, the New York State Department of Financial Services Supervision (NYDFS) issued regulations that organizations engaged in businesses related to the transmission, custody, and storage of cryptocurrencies need to obtain a license (Bit License) before they are allowed to operate. In May of the same year, FinCEN fined Ripple Labs, a chain of companies offering virtual currency exchange services, \$700,000 for failing to register with FinCEN and for failing to meet its anti-money laundering obligations. It aims to establish a legal framework for the commercial use of virtual currencies, regulating the commercial use of virtual currencies in terms of licensing, consumer protection, anti-money laundering, and other elements. 23, Washington State enacted Bill 5031: "Uniform 25, the SEC determined that the tokens of the well-known ICO project The DAO are marketable securities and decided to bring them into the regulatory system, subject to the federal securities laws and regulated by the SEC Regulation. Under U. S. securities laws, platforms offering securities-based digital asset trading are required to register with the SEC or seek exemptions. In 2018, the SEC for the first time enforced against virtual currency trading platforms that engaged in securities-based digital asset trading business without registering or applying for exemptions as required. " In December 2019, the New York State Department of Financial Services Regulation (NYDFS)

released a report on a new proposal to regulate the token listing process for cryptocurrency companies. The new proposal examines how exchanges will handle the governance, risk, and monitoring of tokens, as well as a range of issues for regulators to address before approving a listing.

The issue of cryptocurrency tax regulation has been of concern to the United States since as early as 2013. In its 2013 annual report to Congress, the National Taxpayer Advocate noted that one of the most serious issues facing the Internal Revenue Service (IRS) today is the urgent need to issue guidance on the taxation of cryptocurrencies. The report noted that users of cryptocurrencies are currently growing massively and it is the government's responsibility to make the public aware of the rules that must be followed. Two questions that taxpayer advocates recommend the IRS focus on answering are whether gains or losses are triggered when receiving or using cryptocurrencies and whether those gains should be taxed as ordinary income or capital gains; and how information reporting and recordkeeping applies to cryptocurrency transactions.

In May 2013, the U. S. General Accounting Office (GAO) issued a report identifying potential tax compliance risks associated with cryptocurrencies. the GAO recommended that the IRS find relatively low-cost ways to provide taxpayers with guidance on the taxation of cryptocurrencies without making extensive changes to existing tax rules.

On March 25, 2014, the IRS issued Notice 2014-21 to clarify how existing general tax rules apply to transactions in cryptocurrencies such as Bitcoin. The notice provides answers to 16 frequently asked questions about cryptocurrencies such as Bitcoin. The IRS defines cryptocurrencies such as Bitcoin as a valuable digital representation that can be used as a medium of exchange, the unit of measure, and stored value medium, but does not have the status of legal tender in any jurisdiction. notice 2014-21 also states that cryptocurrencies such as Bitcoin are considered assets (and not a currency) for tax purposes, and the general tax principles that apply to transactions in assets also apply to transactions in cryptocurrencies such as Bitcoin transactions in cryptocurrencies. Taxpayers who mine cryptocurrencies or receive cryptocurrencies such as bitcoin as payment for goods or services must include the fair market value of cryptocurrencies such as bitcoin in calculating gross income; the fair market value of cryptocurrencies such as bitcoin paid as wages is subject to federal income tax withholding and must be reported on Form W-2 (U. S. employee annual tax return); cryptocurrencies such as bitcoin paid to independent contractors are subject to tax and comply with the self-employment coins are subject to tax and self-employment tax rules. Generally, the payer must issue a Form 1099-MISC (Miscellaneous Income) to both the IRS and the recipient.

On November 8, 2016, the U. S. Department of the Treasury's Office of Inspector General for Tax Administration (TIGTA) publicly released a report recommending that the IRS establish a detailed strategic system to more effectively and transparently address the taxation of cryptocurrencies. The report made three recommendations, namely to develop a coordinated cryptocurrency strategy, including establishing goals, how to achieve them, and an action plan

with a timeline for implementation; to provide updated tax guidance, including necessary documentation requirements and tax treatment of various uses of cryptocurrencies; and to revise third-party information reporting documents to determine the amount of cryptocurrency used in taxable transactions.

4.1.2 Australia

The Australian Taxation Office (ATO) provides very comprehensive guidance on the tax treatment of cryptocurrency transactions. The guidance is updated regularly to take into account new changes in circumstances. Relevant documents and statements are posted on the ATO's website and include several examples and reference resources where taxpayers can find a variety of information on specific topics.

I note that the ATO limits the taxation of cryptocurrencies to "cryptocurrencies". Cryptocurrencies are a type of cryptocurrency, and Bitcoin is the quintessential cryptocurrency. The ATO does not hastily characterize cryptocurrencies, stating clearly in the Notice on Taxation of Cryptocurrencies that the income tax on cryptocurrency transactions depends on whether the taxpayer holds the currency for business, investment, or private purposes. If cryptocurrency is held as an asset for personal use and the taxpayer holds the currency primarily to purchase items for personal use or consumption, capital gains arising from personal use assets acquired for less than A\$10,000 are exempt from capital gains tax. If the cryptocurrency is held as an investment, the taxpayer is not entitled to the personal use asset exemption; if the cryptocurrency is acquired as an investment The ATO's notice on the taxation of cryptocurrencies also contains record-keeping obligations that require taxpayers to keep records relating to cryptocurrency transactions. the ATO is the first tax authority to clarify the tax consequences of blockchain unbundling. This gives us great inspiration that only a flexible and easily updatable model of cryptocurrency tax regulation is needed in the face of a rapidly changing cryptocurrency market.

4.1.3 Germany

The target of cryptocurrency tax regulation in Germany has undergone an expansion process from Bitcoin to other cryptocurrencies. in June 2013, German MP Frank Schffler asked the Ministry of Finance about the income tax treatment of Bitcoin transactions and Bitcoin mining. The Treasury responded that bitcoin transactions may generate business income and miscellaneous income. in August 2013, the Treasury responded to two more questions from Frank Schffler, acknowledging that it was unclear which valuation method (e.g., FIFO, LIFO) should be used to determine taxable income from bitcoins stored in the same wallet with different cost bases; arguing that bitcoin is a private currency and that bitcoin transactions are not exempt from VAT.

On January 5, 2018, the Ministry of Finance responded to questions raised by other members of the German Parliament to clarify the taxation of bitcoin for tax and financial

regulation purposes. The Ministry of Finance confirmed that the German Federal Financial Supervisory Authority (BaFin) considers bitcoin to be a financial instrument within the scope of the German Banking Act (KWG). This classification means that bitcoin trading platforms are subject to BaFin oversight and regulation. According to the Ministry of Finance, occasional mining activities may generate other income within the meaning of Section 22 (3) of the Personal Income Tax Act, which is tax-free up to a maximum of €256. The exchange of bitcoins for another cryptocurrency or legal tender within 1 year of purchase may give rise to short-term capital gains within the meaning of Section 23 (1) of the IIT Act. If the bitcoin mining activity or transaction is commercial, the gains arising from that activity will be subject to corporate income tax.

Concerning the VAT treatment of bitcoin transactions, the Ministry of Finance refers to the decision of the European Court of Justice (ECJ) in the Hedqvist case (Case No. C-264/14), which held that the use of bitcoin as a means of payment for goods and services is not subject to VAT and that the conversion of bitcoin into legal tender is exempt from VAT. As the ECJ ruling does not mention bitcoin mining activities, the Treasury believes that the EU's VAT treatment of bitcoin mining activities is unclear.

The Ministry of Finance issued a circular letter on 27 February 2018 confirming that the principles set out by the European Court of Justice in the Hedqvist judgment apply to transactions in cryptocurrencies such as Bitcoin. As a result, the conversion of cryptocurrencies into legal tender is officially exempt from VAT. Payments for bitcoin as goods or services are the same as payments for legal tender and are not subject to VAT. Because bitcoin mining is a one-way, non-reciprocal activity, it is also not subject to VAT. In general, IT infrastructure and services provided by cryptocurrency trading platforms are not exempt from VAT, but if the platform operator buys and sells cryptocurrencies such as Bitcoin in its name, the platform operator is exempt from VAT.

4.1.4 Japan

In 2016, the Japanese government first defined virtual currencies such as Bitcoin as a new type of "payment method" rather than a "currency," and in 2017, the Japanese Ministry of Finance announced tax exemptions for virtual currency transactions. In 2018, the Japanese Financial Services Authority (FSA) introduced the newly revised Japanese Payment Services Law, which clarifies that Bitcoin has legal status and can be used for consumer payments and various corporate and financial companies for a settlement. The Prevention of Transfer of Proceeds of Crime Act is part of this law and has been partially adjusted to require Bitcoin exchanges to verify the authenticity of the identity of account-opening users, keep records of customer transactions, implement fund monitoring, and report suspicious transactions to regulators. In addition to the anti-money laundering obligations of users, the Japanese government has included virtual currency trading platforms, including Bitcoin, in the anti-money laundering regulatory system, adopting a registration system for review and supervision,

requiring platforms to implement network security management, protecting the security of user information, and segregate their accounts from user accounts, among other things. Meanwhile, the Japan Virtual Currency Exchange Association was established, consisting of 16 cryptocurrency exchanges in Japan.

4.1.5 Canada

In 2013, the Canada Revenue Agency issued a notice classifying cryptocurrencies as financial assets. In the same year, the world's first cryptocurrency ATM appeared in Vancouver, and in 2014, the Canadian Parliament passed Bill C-31, which was approved in June of the same year. For Part VI of the Anti-Money Laundering and Counter-Terrorism Financing Act, Section 19 of the bill was amended accordingly. In that amendment, cryptocurrencies are classified as "money services" and therefore the AML and CTF provisions that apply to traditional currencies also apply to cryptocurrencies, i.e., bitcoin and cryptocurrency businesses are subject to certain AML obligations, including implementing customer identification, transaction record keeping, and monitoring funds to report suspicious transactions. In addition, cryptocurrencies are required to be certified and registered with the relevant authorities when exchanged for actual currency. 2020 saw the formal inclusion of a cryptocurrency trading license in Canada, and thus the MSB license also incorporates cryptocurrency trading regulation.

4.1.6 China

Overall, the development of virtual currencies and digital tokens in China can be divided into three stages. The first stage is from the birth of Bitcoin and its subsequent entry into China in 2009 to the issuance of the Notice on Preventing the Risks of Bitcoin (the "Bitcoin Notice") by the People's Bank of China and five other ministries on December 3, 2013. The second stage is from the issuance of the Bitcoin Notice to the issuance of the Notice on Preventing the Risks of Token Issuance and Financing (the "Token Notice") by the People's Bank of China and eight other ministries and commissions on September 4, 2017; and the third stage is from the date of the issuance of the Token Notice to the present.

Specifically, in the first stage, there were no clear regulatory rules for bitcoin trading in China, and bitcoin trading was left to the market. In the second stage, by issuing the "Bitcoin Notice," the domestic financial regulators clarified four basic principles for the regulation of Bitcoin, namely. First, financial institutions and payment institutions are prohibited from directly participating in bitcoin transactions and from providing any financial intermediary and support services for bitcoin transactions; second, Internet websites that provide services such as bitcoin registration and transactions should be filed with the telecommunications regulator. The government also prohibits the provision of any financial intermediary and support services for bitcoin transactions. Second, it requires that Internet sites providing services such as bitcoin

registration and trading should be filed with the telecommunications supervisory authorities; third, it strengthens the prevention and supervision of money laundering risks that may arise from bitcoin; fourth, it believes that bitcoin should be a specific virtual commodity that does not have the same legal status as money and cannot and should not be used as money in the market, but as a virtual commodity, the public can rationally invest and participate in Bitcoin trading. Meanwhile, at this stage, the financing scale and user participation of digital tokens are on an accelerated upward trend, and domestic bitcoin trading is developing rapidly. According to the "Report on the Development of Domestic ICO in the First Half of 2017" released by the National Internet Financial Security Technical Expert Committee in July 2017, there are currently 43 relevant domestic platforms providing ICO services, of which the third-party joining and virtual currency trading + ICO models account for the majority. since 2017, the cumulative financing scale of ICO projects reached 63,523.64 BTC (bit Coin), 852753.36 ETH (Ether), and some RMB and other virtual currencies. Based on the price conversion at 00:00 on July 19, 2017, the total amount was RMB 2.616 billion, with 105,000 participants. At the same time, as with the U. S. Bitcoin market, the market suffers from investment and price volatility issues that are intertwined with several other illegal and even criminal issues. In the third phase, with the release of the Token Announcement, the issuance, and trading of virtual currencies and tokens, including Bitcoin, was banned in China, with three core elements. First, no organization or individual shall illegally engage in token issuance and financing activities, and all types of token issuance and financing activities shall cease immediately from the date of the Notice. Organizations and individuals that have completed token issuance and financing should make arrangements such as withdrawal, reasonably protect the rights and interests of investors, and properly dispose of risks. Second, strengthen the management of token financing trading platforms. From the date of the Token Announcement, any so-called token financing trading platform shall not engage in the exchange between legal tender, tokens, or "virtual currencies", and shall not buy, sell or act as a central counterparty to buy, or sell tokens or "virtual currencies", and shall not provide pricing, information intermediation and other services for tokens or "virtual currencies". Third, financial institutions and non-bank payment institutions are prohibited from conducting business related to token issuance and financing transactions. Thereafter, all virtual currencies and token issuance, trading, and related activities, including Bitcoin, are illegal in China, and China's regulation of cryptocurrencies has entered a comprehensive and strict prohibition phase.

The reasons for China's regulation of cryptocurrencies, from a laissez-faire approach in the beginning to allowing moderate public participation and investment in the mid-term, to the current regulatory policy of prohibition, are complex, but depend on two considerations: first, financial micro-prudential considerations. Taking digital tokens as an example, from the perspective of issuing institutions, digital tokens involve an illegal public offering of securities, suspected of providing channels for criminal acts such as money laundering, suspected illegal absorption of public deposits, illegal operation, etc. For investors, digital tokens are subject to

risks such as fraud and insider trading. The proliferation of malicious short-term trading, hacker attacks, and highly volatile cryptocurrency values have become the main market risks of digital tokens, which can bring irreparable losses to investors and breed speculative behavior. Second, financial macro-prudential considerations. If virtual currencies and digital tokens continue to develop rapidly, the established central bank monetary policy mechanism, commercial bank regulatory system, securities issuance, and investment system will be significantly impacted and challenged. In the absence of mature experience in regulating virtual currencies and digital tokens in China and globally, it is reasonable to prohibit the issuance and trading of virtual currencies and digital tokens from a prudential perspective.

4.2 Comparative Analysis of Cryptocurrency Regulation in China and Other States

In the case of China, the Chinese financial regulatory authorities have essentially never granted the necessary conditions and space for cryptocurrencies to exist as financial instruments. Even in the second phase of relatively lax regulation, Chinese financial regulatory authorities only positioned virtual currencies as a virtual commodity in which the public could make limited investments. At the same time, by prohibiting financial institutions from participating in virtual currency transactions and providing financial intermediation and support services for virtual currency transactions, the conditions and possibilities for virtual currencies and digital tokens to become normal or formal financial instruments were objectively eliminated. Since the issuance of the Token Notice, virtual currencies and digital tokens have officially become illegal to trade in China, and even their limited status as legitimate virtual commodities in the second stage has been substantially impacted and negated. In the absence of a legitimate existence of a spot market for virtual currencies and digital tokens, it is even more difficult for a legitimate existence of market for derivatives based on virtual currencies.

Looking at the regulatory practice of cryptocurrencies, countries such as Japan, the UK, Canada, Australia, Singapore, Germany, and Switzerland are supportive and friendly towards cryptocurrencies and encourage their development in terms of the policy. For example, in April 2017, the Japanese government officially recognized the legal payment status of cryptocurrencies in law by amending the Payment Services Law. Singapore classifies and regulates cryptocurrencies, i.e., capital market products (CMPs) under the Securities and Futures Act. Utility token products, on the other hand, are relatively free and flexible. Both types of products, as long as they comply with regulations such as AML and KYC, are usually not subject to interference from government regulators. Singapore also encourages and allows cryptocurrencies to enter regulatory sandboxes for regulatory experimentation to promote better development of cryptocurrencies. In 2018, the Bank of England further stated its desire

to raise cryptocurrency exchanges to the same regulatory standards as stock exchanges to combat illegal financial activities in cryptocurrencies while regulating and promoting cryptocurrencies. Canadian regulators defined ICO tokens as securities and legalized domestic ICO projects.

On the other hand, countries such as the United States, France, Russia, and South Korea have taken a more cautious approach to cryptocurrencies. With the development of cryptocurrencies such as Bitcoin, the U. S. government and regulators have established regulatory mechanisms that encompass various aspects such as taxation and anti-money laundering. First, from the perspective of consumer protection, each state government has innovated a regulatory system to regulate the development of cryptocurrencies according to the actual situation. For example, New York State has established the Virtual Currency Regulatory Act to protect the interests of cryptocurrency consumers through anti-money laundering measures. California has introduced the Cryptocurrency Regulation Act and the Uniform Regulation of Virtual Currency Business Act, which stipulates that organizations operating cryptocurrencies must obtain operating licenses according to the law, strengthen cybersecurity and anti-money laundering regulation, and promote the process of cryptocurrency regulation in the United States. Second, implement multiple regulations. The Federal Reserve and other banking regulators use customer authentication (KYC) and anti-money laundering (ALM) measures in the Bank Security Act to strengthen cryptocurrency regulation. The U. S. Securities and Exchange Commission provides risk alerts to cryptocurrency investors, emphasizing increased regulation over some time. The IRS treats virtual cryptocurrencies as property and includes virtual cryptocurrency transactions in the payment of taxes. The CFTC includes cryptocurrencies such as Bitcoin in the commodity category and has the authority to impose penalties for improper trading practices. South Korean regulatory authorities regulate cryptocurrencies primarily for banks that provide account services to cryptocurrency exchanges, requiring real-name management of cryptocurrency transactions to improve compliance and transparency for banks in areas such as anti-money laundering. In addition, the South Korean Financial Services Commission has explicitly banned all types of token financing (ICOs) given the potentially serious impact of cryptocurrencies on the country's monetary and economic system. In 2014, Russia banned cryptocurrency trading and shut down several websites and communities. In recent years, the Russian government and regulatory authorities have taken a positive approach to cryptocurrencies. In 2017, the Russian Central Bank approved Voskhod, the country's first legal cryptocurrency exchange. In 2018, the French government established a working group to develop laws and regulations to regulate cryptocurrencies to prevent activities such as tax evasion, money laundering, or financing of crime from cryptocurrency transactions. In addition, the French Financial Markets Supervisory Authority is also considering strengthening the regulation of cryptocurrency derivatives.

At present, cryptocurrencies have attracted great attention from governments, and major countries around the world have started to establish a framework for international regulatory

coordination mechanisms for cryptocurrencies. In March 2018, the Group of 20 (G20) Finance Ministers and Central Bank Governors meeting issued an announcement recognizing the advantages of cryptocurrencies in improving economic efficiency and inclusiveness, but also arguing that cryptocurrencies lack the key attributes of sovereign currencies and can affect financial stability. At the same time, it was emphasized that cryptocurrencies must still comply with FATF (Financial Action Task Force) standards and promote the global implementation of these standards to strengthen the monitoring of cryptocurrencies and their risks. In October 2019, the G20 Finance and Central Bank Governors' Meeting agreed to issue a G20 statement on stablecoins, which recognizes the potential benefits of financial innovation in stablecoins, while, at the same time, noting their role in anti-money laundering, counter-terrorism financing, consumer protection, and market integrity have a range of policy and regulatory risks that need to be assessed and addressed before launching a stablecoin project. The G20 meeting requested that international bodies such as the Financial Stability Board (FSB), the International Monetary Fund (IMF), and the Financial Action Task Force (FATF) continue to study the risks and implications associated with stablecoins.

4.3 Research Findings

The rapid growth of the cryptocurrency industry makes it particularly important to construct a regulatory framework for the taxation of cryptocurrencies. Although cryptocurrencies such as Bitcoin pose considerable difficulties for tax authorities in tax regulation due to their characteristics, tax regulation of cryptocurrencies should not be choked, and countries should solve the difficult problems of cryptocurrency tax regulation according to their national conditions and actual needs.

4.3.1 Establishing industry standards to reduce the risk potential of the industry at the source

Establishing industry standards is conducive to controlling risks at the source. Since there are no standardized and unified criteria for the relevant objects in the cryptocurrency transaction chain, industry standards need to be established to determine the evaluation guidelines and regulate the market order. It is recommended that the relevant departments of the State Council study and formulate the qualifications, procedures, and scope of the subjects of bitcoin and other cryptocurrencies issuance and sales, strictly market access, and conduct qualification reviews and operational inspections of existing enterprises related to bitcoin and other cryptocurrency trading chains. Apply a licensing system to establish a protective barrier between the risks of cryptocurrency transactions and banking institutions and non-bank payment institutions (Fan, 2021).

4.3.2 Clarify the application of the law and include cryptocurrencies in the scope of anti-money laundering regulation

A cryptocurrency trading platform is essentially a virtual goods service provider, which, unlike financial institutions, can be classified as a "specified non-financial institution". According to Article 3 and Article 35 of China's AML Law, cryptocurrencies and cryptocurrency trading platforms should be included in the existing AML regulatory system. The central bank can work with other relevant departments to develop sectoral regulations such as anti-money laundering and anti-terrorist financing management measures specifically for cryptocurrencies (Fan, 2021). In addition, there is a need for legal regulation or judicial interpretation of ICO projects as a new financing method, and the cryptocurrency trading platforms involved in ICO projects should be incorporated into the existing AML regulatory system or the regulatory and restraint system jointly formulated by multiple departments.

4.3.3 Strengthen international cooperation to prevent and combat cryptocurrency money laundering activities

Since there is no geographical restriction on cryptocurrency transactions and regulators can only supervise domestic trading websites, unscrupulous elements will conduct cryptocurrency money laundering activities through offshore internet platforms and circumvent anti-money laundering regulatory means such as real-name registration and transaction registration. By formulating mutually agreeable regulatory regulations, establishing a transnational dispute resolution mechanism for cryptocurrencies, and enhancing communication and information sharing among all parties, member countries can work together to prevent and combat illegal activities using cryptocurrencies for money laundering.

4.3.4 Improve technology and develop regulatory technology support that matches cryptocurrency transactions

Trading platforms should actively promote the effective combination of financial technology and risk management. They should make full use of technologies such as big data, cloud computing, artificial intelligence, machine learning, and blockchain to supervise each object in the cryptocurrency transaction chain and the flow of cryptocurrencies, and realize the digitization of anti-money laundering information management such as customer identification and customer transaction records, as well as the systematization of the risk management system and risk assessment, and further promote risk identification, fund monitoring, and suspicious transaction Prediction. Under the premise of strict compliance with the current securities law, there are no significant legal risks and no damage to the stability of the financial system; on the contrary, by improving the realization of direct financing, the access to securities issuance is expanded and the efficiency of financial resource allocation and the proportion of direct financing is improved (Wang & Li, 2020).

5. Conclusions and Recommendations

By analysing the threats posed by cryptocurrencies to traditional financial markets and the risks of money laundering, cross-border tax evasion and settlement that may be brought about by decentralised trading methods, and by combining the practical experience of cryptocurrency regulation in internationally developed countries, a feasible and effective cryptocurrency regulatory system suitable for China's national conditions has been successfully proposed. On this basis, the following three main objectives have been achieved:

Enhances the systematic nature of China's approach to cryptocurrency regulation and ensures a comprehensive and coordinated regulatory system.

Effectively reduced the risk of money laundering and terrorist financing and ensured the security and compliance of cryptocurrency transactions.

Improved the efficiency of China's cryptocurrency regulatory system and promoted sustainable development and innovation in the industry.

This study is of great relevance. By analysing the threats and risks posed by cryptocurrencies to traditional financial markets, as well as the money laundering risks, cross-border tax evasion and settlement issues arising from decentralised trading methods, this paper provides the government, regulators and financial practitioners with an in-depth understanding of these issues. At the same time, drawing on the practical experience of cryptocurrency regulation in major international developed countries, this paper proposes a cryptocurrency regulatory system that is suitable for China's situation, in order to enhance the systemic nature of regulation, effectively reduce the risks of money laundering and terrorist financing, and improve the efficiency of the regulatory system. These research findings are important guidance for promoting the healthy development of the fintech industry, protecting the stability and security of the financial system, and safeguarding the overall interests of society.

5.1 Conclusion

Since Alipay officially launched its mobile payment service in 2009, China's payment and settlement system has directly leapfrogged the credit card era and entered the mobile payment era. In 2018, the penetration rate of mobile payments in China exceeded 70%, compared to 50% in the U. S., and the transaction scale is among the highest in the world. Cryptocurrencies such as Bitcoin are booming at an unexpected rate, and closely related blockchain technology is entering the mainstream. Cryptocurrency is a complex and unstable technology that could bring generational changes to the human financial system.

From a comparison between China and the U. S., overall the U. S. is currently more open and flexible in regulating cryptocurrencies than China, but it is important to note that this U. S. regulatory framework is shaped by the established U. S. financial regulatory system, philosophy, and even culture. From an objective point of view, U. S. financial regulators have

already established a relatively sound regulatory framework for cryptocurrencies through various means under the existing rules. Second, for the regulation of digital tokens, the SEC has confirmed that digital tokens are securities under U. S. securities laws, so the SEC has the statutory authority to regulate digital tokens, and there are currently no derivatives trading based on digital tokens in the U. S.

Today's controversial blockchain technology reminds us of the information industry of the early 1990s. The power of the Internet was underestimated in its infancy, despite the information technology revolution that has evolved from the Internet to the Internet of Things to artificial intelligence in the two decades since. The past is not worthy of caveat emptor, but the future is to be pursued. Blockchain technology, now faltering, will bring dramatic changes to human relations of production. One of the most common topics of debate about blockchain technology today is that it has yet to spawn a "killer app" to propel it into a mainstream business infrastructure solution. Cryptocurrency is perhaps the first revolutionary, disruptive "product" that blockchain technology has brought to humanity. In the face of the disruptive fintech innovation of blockchain-based cryptocurrencies, the market calls for an aggressive, prudent, unconventional, evolving, compatible, and open regulatory legal regime and path.

To sum up, cryptocurrencies, as a new thing, are far from being deeply and comprehensively understood in their essential connotation and developmental significance, and differences and disagreements still exist among national regulators and international organizations on the conceptual approaches and legal regimes for cryptocurrency regulation. Recently, with the launch of the Libra coin issuance plan with a supra-sovereign nature, the world's eyes are once again focused on cryptocurrencies, forcing governments and regulators to accelerate action steps to unify and coordinate regulation to cope with the challenges and impacts brought by cryptocurrencies to the current financial and economic system. The regulation of cryptocurrencies should be constantly adjusted in ways and methods, and its regulation should not be reduced to make it a harbor for tax evasion and a hotbed of crime. Based on the analysis and comparison of cryptocurrency tax regulation practices in various countries, the author has put forward some less mature suggestions for constructing a cryptocurrency tax regulation framework in China. Only when more and more scholars study cryptocurrencies and their development in depth can we put cryptocurrency tax regulation on the right track.

5.2 Suggestions for improving cryptocurrency regulation in China

First, the overall regulatory attitude and approach to cryptocurrency regulation should be properly adjusted. Regardless of the underlying reasons, the current regulation of cryptocurrencies in China and the United States is actually at opposite ends of the regulatory policy choice. For the U. S., cryptocurrency regulation has entered a more orderly, regulated,

flexible, progressive, and inclusive regulatory state. For China, on the other hand, the regulation of cryptocurrencies has entered a phase of exclusion, restriction, and prohibition. At present, it is not enough to judge which regulatory choice is more scientific and reasonable, partly because of the objective differences in the level of financial market development and financial regulatory systems between China and the United States, and partly because the cryptocurrency market is still in the early stage of development and has relatively limited importance in the overall financial market. However, it should be noted that even though the U. S. financial regulatory authorities are equally vigilant in the face of the range of risks highlighted by cryptocurrencies, their approach, and methods of dealing with the risks are more clearly different from those of the Chinese regulatory authorities. In the case of the U. S., its response has been primarily through regulatory policy articulation, regulatory rule improvements, and specific regulatory enforcement actions, rather than prohibition. To a certain extent, although prohibition can bring significant regulatory effectiveness in the short term, in the long run, it may also deprive a financial instrument and financial market that is still in the early stage of development and has a great development potential of the premise and space for gradual improvement, which should be taken seriously.

Second, the use of digital token technology can be explored to improve the efficiency and proportion of direct financing. As mentioned above, digital tokens can be based on virtual currencies, i. e. they can be issued based on virtual currencies. At the same time, however, digital tokens can also be issued based on other "interests". For China, the low proportion of direct financing has long been an important factor limiting the efficiency of financial resource allocation and the stability of the financial system. On December 28, 2019, the 15th meeting of the Standing Committee of the 13th National People's Congress voted to adopt the newly amended Securities Law of the People's Republic of China (the "New Securities Law"), which expands the types of securities to include stocks, corporate bonds, depositary receipts and other securities, government bonds, shares of securities investment funds, as well as asset-backed securities and asset management products, as determined by the State Council following the law. Judging from the legal provisions, the new Securities Law does not leave room for digital tokens to exist as a type of security. However, it should be noted that there are various classification criteria for the specific types of securities listed in the New Securities Law, and digital tokens are only a technology for issuing securities, a technical means; it is not a new type of security, which is a legal form. In other words, the new Securities Law does not prohibit the existence of digital tokens as a technology for issuing securities. Meanwhile, on December 12, 2019, the Basel Committee released a discussion paper on "Prudential Approaches to Constructing Crypto Assets (Cryptocurrencies) " seeking comments on how to prudently treat commercial banks' crypto-asset exposures to support the Basel Committee's prudential rules for constructing crypto assets in the future. The Basel Committee believes that crypto assets have evolved rapidly over the past few years. Although the market share of crypto assets is still relatively small compared to the global financial system and commercial banks' exposure to

crypto assets is relatively limited, the absolute size of crypto assets cannot be ignored, especially its rapid development trend, which should be of wide concern. The Basel Committee, the body that sets the core rules for global commercial banking supervision, has shown a certain degree of interest in cryptocurrencies, reflecting their potential value and future trends. The ability of financial innovation and regulation is an important part of a country's competitiveness. In the face of the active, orderly, and regulated development of cryptocurrencies in the U. S. and the high level of interest in the development and regulation of cryptocurrencies by international financial regulatory cooperation organizations, China should maintain a focus on cryptocurrencies from any perspective and provide the necessary regulation. " At the same time, regulatory innovation should be actively pursued. It should be emphasized that the issuance of digital tokens, or the issuance of securities using digital token technology, must strictly comply with the securities law, which is the basic requirement of the SEC for digital token issuance. This is the SEC's basic requirement for digital token offerings. Under the premise of strict compliance with existing securities laws, there is no significant legal risk and no damage to the stability of the financial system. On the contrary, it expands access to securities issuance and improves the efficiency of financial resources allocation and the proportion of direct financing by increasing the realization of direct financing.

Again, China's regulatory framework for cryptocurrencies can be constructed by drawing on the experience of the United States. Financial regulation should cover the whole process, link, and cycle of financial products, and access regulation is only a basic part of financial regulation. Only by establishing a sound and complete system of regulatory rules for all aspects and stages of financial products can we give full play to the positive value of specific financial instruments and effectively prevent their inherent risks and defects. Therefore, the level of risk and functional value of a specific financial instrument cannot be judged categorically without analyzing the scientificity and completeness of specific regulatory rules, and this is especially true for cryptocurrencies. Cryptocurrencies, as emerging financial instruments, are, on the face of it, unprecedented. In essence, however, they are simply innovations in the way existing traditional financial instruments are implemented, and while they essentially combine the functions and roles of various traditional financial instruments, they are not incomprehensible and their risks are not uncontrollable. The current boom in the U. S. cryptocurrency market and the relative maturity of its regulatory framework are examples of how cryptocurrencies can be safely developed and effectively regulated. The U. S. cryptocurrency market and cryptocurrency regulatory experience can also provide useful lessons for the development of cryptocurrency markets and regulatory improvements in other countries, including China.

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