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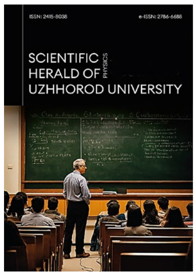

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Criminal law analysis regarding liability for establishing and managing financial Ponzi schemes in certain countries

Talgat Khanov
Karaganda University of Kazpotrebsoyuz
100009, 9 Academic Str., Karaganda, Republic of Kazakhstan

Alemkhan Maitanov*
Karaganda Buketov University
100024, 28 University Str., Karaganda, Republic of Kazakhstan

Akhmetkali Shaimuhanov
Karaganda University of Kazpotrebsoyuz
100009, 9 Academic Str., Karaganda, Republic of Kazakhstan

Abstract

Relevance. Crimes related to investment (financial) pyramids pose a threat to state stability and the economic security of both the country and the individual citizens. The research relevance is predetermined by the need to ensure effective counteraction to the phenomenon in the current environment.

Purpose. The research aims to analyse the criminal legislation of the United States of America, Germany, China and Russia concerning combating pyramid schemes to develop proposals for further improvement of the legislation of the Republic of Kazakhstan on this issue.

Methodology. The analytical, comparative, statistical, legal, and dogmatic methods were used.

Results. The authors conducted a comparative analysis of the criminal law provisions in Kazakhstan and other jurisdictions, examining the various ways in which liability for establishing and operating pyramid schemes is codified, including the different forms, approaches, and techniques employed in the legislative framework. The authors identified common and distinctive trends and developed recommendations for improving the legislative framework in this area. The authors provides a forensic characterisation of the crime of creating and organising pyramid schemes. The statistical data of the Republic of Kazakhstan on this type of crime are studied. In addition, the authors identifies the criteria by which preliminary investigation of this category of crimes should be carried out, which will contribute to a more effective investigation and prosecution of perpetrators.

Conclusions. This study contributes to deepening the scientific understanding of the topic and improving legislation. The results of the study can be used by law enforcement agencies, legislative bodies, and the scientific community to develop and improve legal norms and procedures related to combating pyramid schemes.

Keywords: investment manipulation; historical development; comparative characteristics; economic offences; pre-trial investigation.

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*Corresponding author

Introduction

Crimes related to the creation and management of pyramid schemes cause significant financial losses for individuals and society as a whole. Considering the current conditions of active use of social networks and the Internet space in general, the level of individual protection from fraudulent pyramid schemes is decreasing. Financial pyramids are entering a new stage of development, operating under the guise of legitimate activities. Therefore, the state needs modern mechanisms to counter crime in the context of a developed range of technologies and types of financial pyramids to protect national security and personal safety. The research issue is determined by the legislation on financial pyramids lacking behind society's rapid development, including the concealing, and disguising of economic crimes. Therefore, to address this issue, it is necessary to improve the rules following modern requirements and provide recommendations for improving the pre-trial investigation.

This issue was addressed by A.M. Alibekova [1]. She analysed the issue of qualifications for creating and managing pyramid schemes and pays attention to the definition of the concept of "pyramid scheme". The author examines the features of this phenomenon along with various approaches to their definition. It is proposed to introduce criminal liability not only for organisation and management but also for offering participation in a pyramid scheme. Along with this, it is proposed to consider the issue of liability of participants who were neither the organiser nor the manager of the pyramid scheme. Since it is with the help of the participants, whom the author calls "old participants", the number of investors increases and therefore leads to a social problem in society. S.M. Rakhmetov [2] focused on the prevention of economic crimes, which depends on several factors: the legislative framework and practice of application of norms, the work of law enforcement agencies, civil society. The author concludes that an effective countermeasure is to increase the penalty for the crime under Article 217 of the Criminal Code of the Republic of Kazakhstan [3] and also points out the limitations of Article 217-1 of the Criminal Code of the Republic of Kazakhstan on advertising, as it covers a small number of types of advertising, which gives fraudsters room for action.

A. Biyebayeva and A. Kalguzhinova [4] concluded that any set of initial actions that led to the actual emergence of a pyramid scheme should be considered a pyramid scheme under the Article 217 of the Criminal Code of the Republic of Kazakhstan [3]. The control should be considered as actions related to decision-making on the pyramid's activities after its creation, as well as actions to manage a structural unit. The author emphasises that in the procedural documents of criminal proceedings, it is important that each defendant is informed of the specific types of their actions from the objective side of the crime. Such actions may include attracting investors, holding meetings, distributing funds, organising educational events. The issue was also investigated by N. Jain [5]. Modern multi-level marketing (MLM) was compared with a pyramid scheme. It is concluded that in any scenario where MLM exists, there is a risk that this business may fall into a pyramid, where the main profits go to the main distributors, and the newest participants have a high chance of suffering losses. The study notes that the introduction of a reform that would regulate recruitment commissions according to sales volume could make MLM fairer and help avoid a pyramid structure. However, it does not provide more detailed information on what these reforms should look like.

L.L. Kuriata [6] studied religious pyramid schemes as a financial pyramid. The author described fraud under the pretext of religious beliefs in the form of a financial pyramid. Among the elements of such pyramid schemes are the sale of products to adherents for further sale to third parties, who also need to be involved in the organisation's beliefs as well as the creation of structures to attract followers' donations. O. Tokaji-Nagy [7] notes that the reputation of the direct sales industry is deteriorating due to widespread abuses and questionable practices in the market. The European regulation on pyramid schemes is not an effective tool to combat these problems, as its definition of a pyramid scheme is considered too narrow and applicable only to the simplest pyramids. To protect the interests of the public and victims of pyramid schemes, the paper recommends expanding the definition of a pyramid scheme to include business-to-business (B2B) schemes, prohibiting high entry fees, introducing buy-back policies, and requiring a final sale to the customer.

The research aims to study and analyse global trends in approaches to defining pyramid schemes and establishing responsibility for their creation and management to improve Kazakhstan legislation and practice. The research objectives are to disclose the criminal law and forensic characteristics of crimes related to pyramid schemes, study the historical aspects of their emergence in the world practice, study statistics and provide recommendations for the investigation of this type of crime.

Materials and Methods

Scientific cognition methods were used in this study, which contributed to achieving the goal and solving the tasks set. The methods used were justified due to their effectiveness in analysing criminal legislation and disclosing the specifics of crimes related to the creation and management of pyramid schemes. The following general scientific and special legal methods were used in the course of the study. The historical method was used to study the origin, development, and formation of pyramid schemes as a phenomenon from the first such structure to the present day. Specific well-known pyramid schemes that became the basis for future pyramid fraud schemes were investigated. The analytical method was used for a detailed study of the provisions of the Criminal Code of the Republic of Kazakhstan [3] and the criminal legislation of other states relating to liability for the creation and management of pyramid schemes. This method was used to systematise the regulations, reveal the legal shortcomings of the provisions, and identify the main trends in criminal liability for such crimes. This method was used to outline the main approaches to defining the concept of a pyramid scheme.

The comparative method was used to compare the approaches and regulations in different countries to combat pyramid schemes. This method was also used to identify differences and commonalities in approaches to solving the problem in different legal systems, as well as to consider best practices for further improvement of legislation. Similarities and differences in the corpus delicti of offences in different countries involving fraudulent pyramid schemes were highlighted. The legal and dogmatic research methods were used to analyse and interpret the criminal law provisions relating to pyramid schemes. This method was used to establish a link between the legal provisions and the interpretation of these provisions. This method was also used to identify the shortcomings and gaps in the legislation and to identify opportunities to fill them.

The statistical method was used to collect and analyse data on Ponzi scheme-related crimes in Kazakhstan. The scale of the issue over the last 3 years was established, and trends in the registration of such crimes, the number of cases brought to court and closure were identified. This method was used to determine the effectiveness of law enforcement agencies in dealing with pyramid schemes. The aforementioned set of methods contributed to the achievement of the research objective and disclosure of the issues of crimes related to the creation and management of pyramid schemes. The choice of specific methods was justified by their potential to reveal the main aspects of the problem under study and to acquire the necessary knowledge to achieve the research goal. Scientific studies in the field of criminal law, forensic science, economics, and history were used in the research. The research material basis consisted of Kazakh, Ukrainian, Chinese, US, Indian and UK scholars in the above-mentioned fields.

Results

Commercial organisations, also known as pyramid schemes, attract many depositors and their capital while paying depositors not as dividends (payments from the profits generated by the activity) but at the expense of other depositors and their funds. There are two main approaches to the definition of a pyramid scheme. The former refers to an enterprise that pays out profits in full or in part at the expense of some depositors or investors at the expense of newly attracted depositors. The latter approach considers a pyramid scheme to be a type of fraud where investors' funds are fraudulently attracted, creating the illusion of a highly sophisticated and profitable scheme. At the same time, investors are promised high and fast profits, and consistent and constant payments, which are also made at the expense of other investors. Therefore, the pyramid scheme eventually collapses, as there will never be enough depositors with their assets to satisfy all the higher-level depositors, and this leads to material damage starting with the lower participants in the pyramid scheme.

Nowadays, pyramid schemes appear in many forms, and have been modified and improved. But they all have one common characteristic. And this is because they promise consumers fast, fairly high profits that are always based on the invitation of new and new participants. The profits of the pyramid and each investor come from the investments of new members, not from the sale of goods or services, i.e., profits from operations. Modern pyramid schemes may sell certain products or services, but this is not their main activity, such work is only needed for visibility and to cover the scheme. It is difficult to identify the very first pyramid scheme in history, as it is quite possible that it has not yet been discovered by mankind. However, the earliest known fraud that had roughly the characteristics of a pyramid scheme been the "tulip fever" that occurred in the Netherlands in the 17th century (in 1636) [8]. During this scam, tulip-related debt obligations were sold on Dutch exchanges. People could buy and sell the rights to grow rare tulip varieties that were not yet available on the market. In a short time, the prices of these obligations reached very high levels. However, panic suddenly set in, and prices plummeted. Many people suffered financial losses and numerous lawsuits were filed.

Another scam type, more relevant to the modern world, is associated with the American Bernard Madoff from Minnesota [9]. As an entrepreneur, he organised the largest pyramid scheme in the history of the United States of America by creating the Petters Group Worldwide, which owned Polaroid, Fingerhut, and a controlling stake in Sun Country Airlines. However, in the early 2000s, it turned out that these companies were fully supported by the pyramid scheme. Madoff sold promissory notes and offered a 20% return, offered business financing, and covered the scheme with consumer goods and electronics that the company did not buy or sell. Investors invested $3.65 billion in this company. Thus, both of these frauds reflect situations where people invested in overpriced goods or services in the hope of making a large profit but ended up suffering large financial losses. Italian-born American businessman Charles Ponzi created one of the first and most famous pyramid schemes in modern history in the period after the First World War. In December 1919, Ponzi founded a company called the Securities Exchange Company, which promised investors to double their investment within 90 days [10].

Ponzi's company quickly gained popularity, and he received substantial amounts of money, even up to $1 million a week. However, in July 1920, newspapers began to reveal some flaws in Ponzi's business model. By the end of the summer, it turned out that Ponzi's company was bankrupt. Ponzi became known for his fraudulent activities in the field of pyramid schemes. His scheme attracted many people, but finally collapsed, showing the dangers and financial risks associated with pyramid schemes. Losses from Charles Ponzi's activities in the US are estimated at $3 million at the exchange rate of the time.

Thus, the Ponzi scheme is considered a benchmark and a classic for subsequent schemes, and it is believed that the pension insurance system also has elements of this pyramid, as the system is threatened with collapse with a declining population [11]. The most famous financial pyramid scheme in Russia and the entire post-Soviet space is MMM, founded by Sergei Mavrodi. Registered in 1989, the company became a joint-stock company only in 1992 and began selling its securities in 1994. This Ponzi scheme pyramid could not exist for long and, after its collapse, was reopened in Ukraine in 2011 [12]. The new Mavrodi system consisted of buying securities at the appropriate rate (Mavro-dollars). The rate is constantly changing depending on Mavrodi's orders, but gradually rising from 10 to 100%. The number of victims of the new scheme was 2 million people. From the 1990s to the 2000s, such pyramids as MMM OJSC, Hopper-Invest, Russian House Selenga, and Vlastelina operated in the territory of the Republic of Kazakhstan. In the modern period of Kazakhstan's history, well-known pyramid schemes include Respect LLP, FinStatus, Optovka, and Questra Holdings Inc. [1].

A Ponzi scheme is a scheme of financial relations that is presented as a highly profitable business or investment project, in which participants can become persons who have invested financial or non-financial assets in the project, possibly with the use of methods of influencing a person. The income of such participants is paid out of the contributions of other participants. An investment pyramid is a tiered structure in the form of "pyramid steps" that help investors gain some context as to what the overall level of risk and reward is for a particular investment [13]. Yu.Ya. Khamyha [14] identifies the following signs of a pyramid scheme: the offer of high profits, the lack of documents, namely licences, state certificates, and other state-issued permits, but the presence of certificates and letters of commendation for first places in ratings, competitions, exhibitions, drawing attention to the participation of famous people in their project, additional rewards for the number of new participants. There are also such features as holding seminars, raffles of expensive gifts, and joint leisure activities to attract new members. As a rule, a pyramid scheme does not inform about any risks for the participant, emphasising that funds must be invested here and now, otherwise the offer may be lost. The legal address of such an organisation may be absent or located in different jurisdictions, as the use of office space without conducting business is unnecessary – the use of modern technology and rented offices are often indicative.

A pyramid scheme protects itself from being accused of fraud by including in its regulations a provision stipulating that payments to depositors are made from the deposits of other participants. This provision is signed by all participants and there is no deception or breach of trust, which is a sign of fraud. Therefore, there is an opinion that pyramid schemes are almost indistinguishable from other financial institutions such as banks, insurance companies, and funds (also called classic legal pyramid schemes). However, the main difference between a pyramid scheme and a financial institution is licensed activity. Financial institutions receive a permit and must comply with the requirements of special regulations. The traditional Ponzi scheme is considered to be the most popular today, but new types of pyramid schemes are gaining popularity, for example, Internet pyramids, which work by spreading massive misinformation, persons are not contacted by specific people and funds are sent to an unknown account with the consent of the person. Since disinformation plays a central role in pyramid schemes, each of them fights for supporters in different ways, including the involvement of specialists and the division of roles in the organisation.

The following main types of modern pyramid schemes can be identified. These include network marketing pyramids, "elite clubs", spiritual societies, online financial brokers, high-interest deposits, and credit institutions with very low rates. However, in general, all types of pyramid schemes can be divided into two main types: the Ponzi scheme and the multi-level pyramid scheme. As Ponzi schemes have become more recognisable in modern society and people have become more educated, they have become less trusted. This is how multi-level pyramids appeared, which carefully hide their essence under certain types of activities, covered by legal grounds. The difference between these types of pyramid schemes lies in the sources of income, the structure of participants and the duration of their existence.

A multi-level pyramid is decentralised, as a member can only interact with members one level above or below. In a Ponzi scheme, everything is centralised, as there is a single organiser who receives contributions and pays out rewards. The source of income in a multi-level pyramid is the participants' contributions, which are usually clearly regulated in terms of time and amount, of the initial contribution. Otherwise, the source of profitability is the company's history and idea, which speak of superior success and income. Since a multi-level pyramid with the help of modern technology attracts a large number of investors at once, it risks collapsing very early on because the limit is reached too quickly. Whereas a Ponzi scheme can work for years if the organiser can convince the largest investors to continually reinvest their income [14]. MLM is also a separate category. It is based on a multi-level structure where recruitment income is as important as sales income. In addition, participants can receive additional interest from attracting new members and from the moves of lower-level participants. Therefore, the more participants recruited, the higher the income. This type can be either a pyramid scheme or a new type of marketing based on sales and recruitment. And the income of such an enterprise depends on sales and contributions of new members, and therefore the constant attraction of new members is inevitable [15].

Article 217 of the Criminal Code of the Republic of Kazakhstan [3] provides for liability for the creation and management of a pyramid scheme. The Republic of Kazakhstan defines the concept of a pyramid scheme in detail. Article 217 defines that the creation of a pyramid scheme (and therefore the pyramid itself) is the organisation of activities to obtain property benefits (income) from the attraction of funds or property, rights to property of an individual or legal entity without raising funds from entrepreneurial activities with the provision of the assumed obligations through the distribution of assets and enrichment of some participants at the expense of other participants and their contributions. This offence is punishable by a fine in the amount of one to three thousand monthly calculation indices together with community service for up to one thousand two hundred hours, imprisonment for up to 5 years, or deprivation of liberty for the same period with confiscation of property. The study also contains special corpus delicti of this offence, namely, committed by a group of persons, repeatedly, using their official position, to attract large amounts of money. At the same time, a person who is not the organiser and who voluntarily reported aiding and abetting and contributing to the disclosure and termination of the pyramid scheme is exempt from criminal liability provided that his or her actions do not contain the elements of another crime.

The objective side of the crime consists of actions to create a financial (investment) pyramid, management of the pyramid or its structural unit. The offence is formal in construction and therefore the mere fact of creation or management is sufficient to bring to justice under this article. According to the statistics of the Legal Statistics Authorities, more crimes under Article 217 were registered in 2021 than in 2022 and 2023 (Figure 1). This trend may be due to the pandemic when there were sufficient conditions for their development and people were looking for additional income. At the same time, the vast majority of cases are closed and referred to court, which demonstrates the effective work of pre-trial investigation bodies.

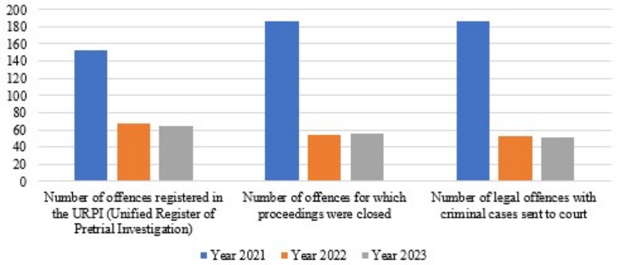

Figure 1. The number of offences under Article 217 of the Criminal Code of the Republic of Kazakhstan registered as of June of each year, the number of closed proceedings and referred to court
Source: [16].

The organisation of a pyramid scheme may be a type of fraud in the case of actions aimed at organising a pyramid scheme. However, following Article 13(3) of the Criminal Code of the Republic of Kazakhstan [3], the qualification is carried out according to a special rule. It is necessary to distinguish between the offence of fraud, i.e., the acquisition of property by deception and breach of trust, where the organisers of a pyramid scheme deceived investors about the risks of losing their deposits. If there is no deception, i.e., participants are told the truth, or they sign a certain organisational regulation or acceptance of risks, such actions of the organiser will be qualified as the creation of a pyramid scheme.

Regarding the creation of a pyramid scheme, as stated in Article 217, these are actions of the organisation, i.e., the implementation of any set of actions, such as developing a scheme, marketing plan, developing a company idea and design, developing documents that make the pyramid scheme conditionally legal in the state, building a strategy for attracting investors. At the same time, management actions are activities after the creation of a pyramid scheme that involve making non-routine decisions, such as opening a division, expanding the scope of activities or territory of activity, coordinating and management, distributing responsibilities, organising training, seminars, distributing income, maintaining websites. This also includes the head of a pyramid unit [4]. The object of this crime is public relations on economic security, which are encroached upon by the subject. The subject of the crime is a natural person of sound mind who has reached the age of 16. However, the qualified offender is assumed to be an official. The subject of the offence under Article 217 of the Criminal Code of the Republic of Kazakhstan [3] may be the founder of the pyramid scheme (organiser) or the manager. The subjective side of the crime is represented by guilt in the form of direct intent.

Along with the liability of the organiser, it is proposed to provide for the liability of the participants, since today they are mostly informed of all the risks and opportunities, but deliberately become participants in a pyramid scheme because they believe that nothing will happen to their deposit or that they will have time to withdraw their deposit and earnings. Such participants are actively working to attract new depositors, as it is in their financial interests. In this way, they knowingly encourage others to participate in the pyramid scheme [13]. In the system of forensic characterisation, the object of the crime plays an important role. Material values are the direct object of the offence. Obtaining the object of a crime encourages various ways of involving participants. These methods are usually based on a person's desire to get rich or earn a certain amount of money. Therefore, a profitable investment with a high-interest return is offered. There is a scheme with a simple offer to make money, which may be distributed by leaflets or sent online. The offer is usually very attractive, and friendly people are chosen to distribute it, who are pleasant to talk to. When a person responds to a job offer, they are told that the company is engaged in a type of business that is developed abroad – network marketing. Often people do not understand what it is, and they are told about super-profits, expensive houses, and cars. But to get all this, a certain amount of money has to be paid in and a few more friends have to be brought along with their contributions.

As modern technology develops, pyramid schemes using it are spreading. Internet-based pyramid schemes are particularly dangerous, as there is no contact with real people, and it is difficult to trace transactions and identify individuals. Inexperienced Internet and technology users, such as pensioners, are very vulnerable to the influence of pyramid scheme marketers. They can easily be won over by young people in nice suits with trustworthy social media profiles. At the same time, pensioners and other disadvantaged groups already have access to the Internet and minimal technical equipment, but lack access to information, proper education, or legal awareness to resist such proposals. For them, it looks very positive, especially if they are told that the company is foreign, European, as many victims believe that what is foreign and not their own is better and safer, based on their experience in the Union of Soviet Socialist Republics. At the same time, the elderly is not well-versed in the banking system and can easily transfer card details and funds. That is why it is necessary to provide for a separate offence and create Article 217-2 with the following title: "Creation, management of a financial (investment) pyramid and distribution of advertising about it with a call for investments using the Internet, information and telecommunication technologies, online and electronic payment systems".

S.V. Romanenko [17] identifies two main types of schemes in pyramid schemes. The first one is when the organiser(s) immediately foresee the deception of investors and do not intend to complete the project. In this case, the option of stealing deposits remains. The second type involves a massive and fairly aggressive marketing campaign to maximise the number of investors and deposits in the project and then close it at the appropriate peak point and receive funds. From a forensic point of view, a characteristic feature of pyramid schemes and similar economic crimes is that business activity (or fictitious business activity), and a business entity are used to disguise and achieve the purpose of the crime. This is characterised by the provision of a state document confirming the status of the activity, which assures people of the legal basis of their activities and allows the use of banking operations and card transfers, which facilitates the creation of fraudulent transactions. Financial pyramids are also characterised by the creation of conditions under which it is possible to shift responsibility to other persons [18].

Since, based on the above information, financial pyramids are evolving, spreading rapidly through the Internet, and are covered by legal or partially legal documents, in a certain way carry out demonstrative activities for the sale of works or provision of services, it is proposed to change the wording of part 1 of Article 217 and set it out in the following wording. Establishment of a financial (investment) pyramid, i.e. organisation of activities aimed at raising income (property benefits) from raising money or other property or rights to it of individuals or legal entities with partial use of such for business activities that are necessary to cover up a pyramid scheme, create the appearance of legitimate business activities or without such use, which ensures the obligations assumed, by redistributing such assets and enriching some participants at the expense of contributions from others.

A pyramid scheme cannot exist without advertising on various resources, as well as without personal advertising and invitations to participants. This is one of the activities of the pyramid, in which funds are invested first and special attention is paid second. For example, the organisation of seminars, meetings and exhibitions is also an element of advertising and marketing, the use of famous personalities, and influencers to promote the idea of the pyramid. And, of course, personal advertising from each participant who is directly interested in attracting a large number of new members.

Therefore, along with the provision of Article 217, there is Article 217-1 of the Criminal Code of the Republic of Kazakhstan [3], which provides for liability for advertising a pyramid scheme, i.e. for personal and direct dissemination of information about the scheme either publicly or through the media or information resources, which led to the involvement of persons in the scheme and caused them significant damage. According to Article 13, Part 1, Clause 6 of the Law of the Republic of Kazakhstan No. 508-II "On Advertising" [19], advertising of financial (investment pyramids) is prohibited. According to Article 3(1)(1-2), advertising is information that is placed and/or disseminated in any form by all possible means and methods, has an indefinite range of persons as its purpose and is made to arouse or maintain interest in an individual or legal entity, services or goods, and facilitating their sale. On the objective side, the corpus delicti of the offence involves an act in the form of an action that results in the involvement of persons in a pyramid scheme with significant damage to them. Accordingly, the objective side is constituted by the causal relationship between the act and the phenomenon, since in the absence of at least one of these three elements of the objective side of Article 217-1, the corpus delicti will be absent. Therefore, such an offence is a material one.

The authors propose to define liability for knowingly advertising a pyramid scheme as a formal offence without significant damage. Since the pyramid itself is an economically and socially dangerous phenomenon, its advertising and promotion should be outlawed, and criminal liability should be provided for. The following is the wording of part 1.1 of Article 217-1 of the Criminal Code of the Republic of Kazakhstan: "Knowingly deliberate advertising of a financial pyramid (investment), when an individual and/or legal entity knows that it is a financial pyramid that meets the criteria of the same in Article 217 of the Criminal Code of the Republic of Kazakhstan". From the subjective side, it is guilt in the form of direct intent, the subject being a natural sane person who has reached the age of criminal responsibility. The development of forensic characteristics for economic and financial crimes is an important condition for the creation of detailed methods of investigating crimes and recommendations for identifying their signs and choosing the right areas of investigation.

The systematic study of the natural relationships between the elements of forensic characteristics of different types of crimes helps to create typical versions that serve as the basis for developing versions within specific criminal cases. The following elements of the forensic characteristics of economic crimes can be identified. The object of the criminal offence is determined by the specific object that becomes the target of criminals in this area. This can be, for example, money, property, securities, bank accounts, credit cards. The crime method describes the way and technique used by criminals to commit fraud with financial resources. In the case of pyramid schemes, this may include the use of false documents, forged signatures, false advertising, and the dissemination of a "pretty picture" on social media. Possible variants and schemes of committing the crime have already been identified above in the analysis of the types of pyramids, for example, possible schemes in the form of network marketing, elite club, and insurance companies.

Circumstances of the offence define the environment, conditions and circumstances that facilitated the commission of the offence. For example, there may be certain areas of financial services where fraud is less likely to be detected, or the use of new technologies to disguise the crime or the use of fictitious business activities to conceal a pyramid scheme. Furthermore, preparations for criminal acts often include the falsification of various documents, including personal data, constituent and registration documents, financial statements and plans for forecasting the flow of funds to the borrower's accounts. Bribery of bank employees or representatives of other creditors may also be a factor contributing to the successful completion of the crime. The environment in which financially motivated crimes are committed may be created by criminals or may arise from inconsistencies, contradictions or gaps in the legislation governing the business sector. For example, the nature of the environment in which Ponzi schemes are committed includes many aspects relating to the preparation, execution, and evasion of criminal activity. It also considers various subjective factors related to the attitude of employees of banks and other credit institutions to their duties and their professional training. Investigative patterns of crime: leaving behind traces of information that can become a source of evidence and open up avenues of investigation. This can include traces of emails, financial transactions, documents.

The element of the forensic characterisation "identity of the perpetrator" describes the identification and analysis of the person (or persons) who committed the crime. A Ponzi scheme perpetrator may have different characteristics and attributes, but certain common features are often observed in such criminals. This is a person who is 16 years of age or older. A Ponzi scheme offender can be a very charismatic and persuasive person. He knows how to use his communication skills to inspire trust in his potential victims. Knowledge of financial mechanisms. Since pyramid schemes are based on the promise of quick and high profits, the offender knows investment strategies to create a convincing scheme. Use of social connections. The offender may use their social connections and acquaintances to recruit more people into the pyramid scheme. It is important to understand that criminals who create pyramid schemes are mostly working illegally and trying to evade the law. They may change their methods and locations to avoid investigation and detection. Investigating such crimes can therefore be a challenge for law enforcement agencies and requires specialised knowledge, resources, and cooperation with financial and cyber security professionals.

Such crimes are often committed by organised criminal groups, which requires detailed preparation and active measures to avoid detection. A typical criminal scenario in cases of financial resources fraud is characterised by the presence of material and ideal sources. A special mechanism of the crime is the reflection of the actions of criminals in various documents produced by computer equipment using modern software, scanners, inkjet, and laser printers, including colour printers. In the case of financial resources fraud, documents can be forged in various ways, using modern technical means, introducing changes that are signs of criminal activity. To prove the guilt of criminals in the case of organising and managing a pyramid scheme, attention should be paid to such evidence as financial documentation and accounting, which confirms the necessary actions of criminals to create and manage the pyramid scheme; testimony of witnesses who can testify to the active participation of criminals in recruiting new participants; analysis of bank transfers and cash flows, which confirms the existence of a pyramid scheme; identification of relations between the organisers and participants of the pyramid scheme. Expert opinions are also required on the nature of financial transactions and whether the promised profit is in line with the actual possibilities.

Therefore, it will be necessary to prove with the help of evidence that a pyramid scheme was created, and that the offender is running a pyramid scheme and not any other legal type of business under which they are disguised. It is important to prove the facts of contributions from different participants, the absence of genuine business activity and the payment of income to participants at the expense of other participants' contributions. When investigating such crimes, law enforcement agencies have to involve experts in economics, finance, and information security. Examination of financial transactions, banking data and documents is an important stage of the investigation. A large amount of financial information may require the use of specialised software for analysing and reconciling data. In addition, the investigation of such crimes requires cooperation with the international bodies of Interpol and other countries, especially if the actions of the criminals are international in nature or involve foreign investors. Ponzi scheme crimes can also be carried out using modern technology and cryptocurrencies, making investigations even more complex. Cybersecurity professionals may be included in the investigation process to identify traces of the perpetrators in cyberspace. The safety of witnesses and victims must also be ensured, as pyramid scheme organisers may seek to influence or intimidate them to avoid exposure.

Investigating Ponzi schemes requires a high level of professionalism, coordination between different law enforcement agencies and cooperation with experts. However, effective investigation of these crimes is essential to ensure financial stability, protect investors and prevent similar fraudulent schemes in the future. One of the most effective measures to prevent Ponzi schemes is to increase financial literacy and promote the use of fraud detection and investment fraud tools. Additionally, strengthening the control of financial institutions and state regulatory authorities can also help prevent and solve such crimes. The general description of the crime of organising and operating a pyramid scheme allows for a better understanding of its features, consequences, and methods of combating it. This crime is a serious challenge to the financial system and public confidence in it, and its prevention and detection are essential to ensuring financial security and stability. Investigating Ponzi schemes is particularly challenging due to the complexity of gathering evidence, analysing financial transactions, and identifying organisers and participants in such schemes. As these crimes often have a schematic structure, criminals can use various methods and technologies to evade detection.

The global experience of combating pyramid schemes involves different approaches and peculiarities depending on the country and the history of the development of such schemes in a particular country. For example, the USA. This country has a financial monitoring system to combat money laundering. This system restricts access to the financial system for certain persons, namely those involved in money laundering and terrorist financing. It provides broad powers to the authorities to identify the main organisations used for money laundering or terrorist financing. The State Insurance Supervision Service has a Fraud Bureau as a separate special unit with special powers [14]. Some states have special laws and regulations relating to pyramid schemes and other forms of marketing fraud. For example, the state of Florida has the Deceptive and Unfair Trade Practices Act [20]. The law prohibits chain referral sales to persuade a buyer to purchase something for a certain amount, and the buyer undertakes to invite other participants, for which he or she receives payment or commission. According to the Pennsylvania Unfair Trade Practices and Consumer Protection Law [21], a pyramid scheme is any scheme in which a person pays a fee, money, or other financial benefit for the opportunity to receive compensation, regardless of whether he or she receives other rights or property. In the United States, the fight against pyramid schemes is carried out to a greater extent on a state-by-state basis and at the level of state regulations than at the level of national legislation. The U.S. Attorney General's Office announces a pyramid scheme to prosecute fraudsters every few years. For example, Operation Shattered Trust, which led to the prosecution of five hundred people involved in pyramid schemes.

The US legal system distinguishes between pyramid schemes and MLM. This distinction is made by the Federal Trade Commission and is not enshrined in federal law. Relevant decisions are also made at the state level, as mentioned above. However, since the US has a case law system, such actions have a positive result [22]. As for the Russian Federation, Article 14.62 of the Code of the Russian Federation on Administrative Offences [23] and Article 172. 2 of the Criminal Code of the Russian Federation [24] classify as pyramid schemes organisations that engage in activities aimed at raising funds and/or other property of individuals and/or legal entities, whereby the payment of income and/or other benefits is made at the expense of previously raised funds or other property of individuals and legal entities in the absence of investment and/or other legitimate business or other activities that would be associated with the use of funds or property in the amount corresponding to the number of funds or property raised.

Thus, according to Article 172.2 of the Criminal Code of the Russian Federation [24], organising activities to raise funds and/or other property of individuals and/or legal entities in large amounts and especially large amounts in the course of the activities defined above is punishable by a fine, correctional labour, imprisonment, or restriction of liberty. The amount of punishment depends on the amount of funds involved in large or especially large amounts. According to Article 170.1 of the Criminal Code of the Russian Federation [24], a large amount of value, loss, income, or debt over two million two hundred and fifty thousand roubles is recognised as a large amount, and a particularly large amount is nine million roubles. If the actions of organising a pyramid scheme do not constitute a crime, i.e., do not involve funds in large and especially large amounts, such actions constitute an administrative offence under Article 14.62 of the Code of the Russian Federation on Administrative Offences [23].

Along with these articles, the creation of pyramid schemes in Russia may be classified as fraud under Article 159 of the Criminal Code of the Russian Federation [24]. Fraud is defined as the theft of another's property or obtaining rights to another's property by deception or breach of trust. In addition to Article 159, fraud is also covered by Articles 159.1 to 159.6, which cover various areas: lending, receiving payments, insurance, using electronic means of payment(s), and computer information. The Criminal Code of the People's Republic of China [25] provides for financial fraud offences in a separate paragraph. Article 192 states that fraudulent accumulation of capital for misappropriation in a significant amount is punishable by imprisonment for up to 5 years or arrest and an additional fine of RMB 20,000 to 200,000. The liability becomes higher in the case of a large-scale, especially large-scale, and aggravated offence. In such cases, the penalty is imprisonment for five to ten years with a fine of RMB 50,000 to 500,000 and imprisonment for ten years or more, or life imprisonment with the above fine and confiscation of property, respectively.

Article 200 of the Criminal Law of the People's Republic of China [25] also provides that the crimes referred to in Articles 192, 194 and 195 are committed by or concerning an organisation and that the organisation's directors and other directly responsible persons are liable. Such actions are punishable by imprisonment for up to 5 years, and in the presence of aggravating circumstances or particularly large amounts, life imprisonment is possible. According to Article 224-1 of the Criminal Code of the People's Republic of China [25], an organisation managing a pyramid scheme that violates the economic and social order, involving the transfer and receipt of property by fraud, in which, under the guise of business activities such as the sale of goods and services, participants are required to pay contributions or purchase goods as a condition for joining the organisation. A hierarchy is created that directly or indirectly relies on the number of members involved as the basis for the payment of remuneration or the return of funds, and in which members are required or encouraged to recruit new members. Such actions are punishable by imprisonment for up to 5 years or arrest and a fine. If such actions are committed with aggravating circumstances, they are punishable by imprisonment for a term of 5 years or more without an upper limit and a fine.

Turning to the Criminal Law of the European Union, the German Criminal Code [26] does not define the concept of a pyramid scheme, and therefore such activities may be punishable under Section 261 Money Laundering and Section 263 Fraud. Paragraph 263 describes fraud in the most precise way, in that it implies the activity of a pyramid scheme based on the content. Paragraph 263 provides for criminal liability in the form of imprisonment for up to 5 years and a fine for anyone who, to obtain a property benefit for himself or a third party, causes damage to the property of another person by misleading or maintaining deception by misrepresenting false facts as true, or by distorting or concealing facts. At the same time, paragraph 263(2) makes it an offence to attempt such actions.

Depending on the country, pyramid scheme offences are either standalone offences or are part of fraud or money laundering or other economic crimes. The difference lies in the consequences, i.e., the formality or materiality of the offence. In the case of Kazakhstan, Russia, China, and the laws of certain US states, the offence of organising a pyramid scheme is considered formal, i.e., the mere fact of creation is sufficient, while qualification as a fraud in Germany requires damage and has a mandatory element of causation. In this sense, the criminal law provisions of the Republic of Kazakhstan are more progressive, as they allow for the prevention of damage caused by pyramidal financial schemes and punishment is imposed for their mere creation.

Discussion

I. Wahyudi et al. [27] examined modern Ponzi schemes on digital platforms, including real estate and cryptocurrencies. They argue that gambling is not a new scheme, but a modernised Ponzi scheme, albeit a hidden one, which is why a large number of people participate in it. People play a financial illusion through the financial products offered to them, but the risks in this scheme are successfully hidden. The scheme is identical to classical pyramid schemes, where slightly different financial products such as stocks, currencies, and investments are offered, and profits are promised without risks. Thus, the paper concludes that modern Internet pyramid schemes should not be distinguished as a separate type, as they are the same scheme as a classic pyramid scheme, with only the form and appearance differing. For example, in such pyramids, like Ponzi, the business requires recruitment of new members who will be the basis of financial circulation for the old members, without buying and selling goods or services and, in practice, with a delay in payments to new investors to ensure payments to old investors. This practice was called the gap closure system.

S. Deb and S. Sengupta [28] examined the topic of pyramid schemes in terms of identifying the factors that encourage people to invest in pyramid schemes. They describe open-ended interviews with people from West Bengal, India, specifically in the Haragpur area. It was concluded that relationships between community members help the scheme to grow. The motivation is the hope of increasing profits in a short time, combined with limited access to a range of banking services. Limited education is also a reason, as a lack of knowledge and experience facilitates people's entry into pyramid schemes. The study shows that the participation of famous people, politicians, and people with good reputations also affects the attraction of new members. People who cannot wait and want to get rich as soon as possible want to join pyramid schemes. Financial and legal illiteracy does not allow victims to analyse documents or facts, so they trust those who recruit them [29; 30]. The study also notes that unemployment, especially in rural areas, encourages young people to participate in such schemes as recruitment agents.

The structure and process of organisation of the pyramid scheme in China and the general was studied by P. Feng et al. [31]. The study investigated the microstructure and interaction within the pyramid scheme. The results of the study showed that the pyramid scheme is a branched network that is connected and trimmed by a single centre (core-periphery system). It is homogeneous with a minimum of cross-connections. The findings of the study provide important features in the formation of communication relations in pyramidal structures of organisations. Firstly, the communication network is a core-periphery structure, which indicates that members of the organisation on the periphery and in the network do not communicate with each other. Secondly, the leader of a pyramidal organisation is very vigilant and does not rely on the communication network to complete the management of the organisation. This may explain his ability to effectively manage and control the organisation. Thirdly, the communication network has characteristics of hierarchy and agglomeration, while ties in communities and inter-hierarchical ties of members are rare. This indicates that communication between members is predominantly within certain hierarchical levels and groups on the same line or one step below or above, no further. Finally, the communication network shows an apparent homophily, where people in the same community or those who have also been prosecuted establish links with each other. This indicates a tendency to communicate between people with similar status or common interests.

Thus, the findings of Feng et al. provide useful data for understanding the dynamics of communication relations in pyramidal organisations. However, the study has its limitations. Firstly, the analysis was limited to a specific pyramidal organisation, so more research is needed to generalise the results to other pyramidal structures. Secondly, since the data is incomplete, more detailed analysis may be needed to fully understand the specifics of communication links. The studies differ in that they did not investigate the structure and connections in the middle of the financial pyramid.

B. Hock and M. Button [32] investigated this topic from the perspective of forensic and criminological characteristics of victims of pyramid scheme fraud. They analysed and characterised two types of victims of Ponzi schemes – the "almost perfect victim" and the "perfect victim". Both types of victims are potential participants in the pyramid scheme but have their characteristics of "Almost perfect victim": these victims were attracted to the pyramid scheme under the influence of pressure and false information. They usually do not attract many new members and may suffer financial losses. These victims often fall victim to criminal fraud and illegal schemes that violate the laws of many countries. The "ideal victim" has specific characteristics that make them more attractive to criminals. For example, an older woman who lives alone and suffers from the early stages of dementia may be considered an ideal victim. Criminals may use various tactics, such as high-pressure sales or religious recruitment, to turn people into victims. The study also discusses the concept of vulnerable victims [33; 34]. It is noted that a person who is unable to take care of or protect themselves or others from harm or exploitation can be considered vulnerable.

The vulnerability may depend on the circumstances and situation, and it may change over time [35; 36]. In general, the aforementioned study explores the concept of victims of pyramid schemes and the features that make them attractive to criminals. It also highlights the various techniques used to attract victims and exert pressure on them. At the same time, this study does not delve into the characteristics of the victim, since according to the Criminal Code of the Republic of Kazakhstan, in the crime of organising a pyramid scheme, the victim is an optional element of the crime, but victims are almost always involved in the forensic characterisation of this type of crime as deceived participants who have lost their money.

S.K. Msosa [37] examined examples of modern Ponzi schemes in South Africa, which involve schemes that offer unusually high returns and rewards for actively recruiting new participants. For example, in the "Up Money" pyramid scheme: participants were attracted to a platform where they had to pay a one-time fee and recruit five more new participants. After that, they would move to a higher level and receive compensation. This type of scheme defrauded more than 230,000 people. MLM schemes: In poor economic conditions, South Africans are looking for ways out of poverty and debt, and MLM schemes are becoming popular. However, some of these schemes can be confused with Ponzi schemes, and this poses a risk to investors. Such examples demonstrate that Ponzi schemes and pyramid schemes continue to harm South Africans and strict measures are needed to prevent and regulate them.

The author also argues that it is difficult to distinguish between a legitimate business opportunity and investment fraud, especially for inexperienced investors or clients. In particular, multi-level marketing schemes can be intertwined with pyramid schemes, which leads to losses for some participants. It is concluded that strict financial regulation is needed to detect and prevent illegal pyramid schemes. It is important to provide financial literacy for consumers to help them distinguish between legitimate opportunities and fraud [38-41]. In contrast, the aforementioned study focuses on the analysis of specific pyramid schemes in South Africa, while this paper outlines the characteristics of pyramid schemes as a general phenomenon. However, in general, the papers agree that pyramid schemes pose a serious threat to financial stability and consumer confidence. There is a need for stronger regulatory controls and financial literacy to protect citizens from fraudulent schemes and to regulate their emergence.

The study by S. Mukherjee et al. [42] discusses examples of cryptocurrency pyramid schemes that have caused losses for many investors. These schemes demonstrate a pattern of behaviour similar to traditional Ponzi schemes but with the use of cryptocurrencies to attract investors' attention. An example is the PlusToken scheme, which in China in 2018 promised high returns to early investors from later investors without any business activity. Fake websites were used to attract investors, and this resulted in losses of $6 billion. A correlation between the sharp drop in the value of Bitcoin and the sale of previous profits from this fraud is also considered. The study investigates the identity of the Indian pyramid mastermind Amit Bhardwaj, who also used Ponzi schemes in the cryptocurrency context, promising 10% monthly returns to investors in a short time. The author emphasises that the cryptocurrency market is now attractive to fraudsters.

The increasing popularity of cryptocurrencies and their market capitalisation create new opportunities for fraudsters who use these schemes to get rich quickly. Such cryptocurrency schemes operate as high-yield investment programmes (HYIPs). The aforementioned study focuses on modern cryptocurrency fraud and specifically examines pyramid schemes aimed at this purpose. This study mentions the existence of modern Internet pyramids, including those related to cryptocurrencies, but does not go into depth in their study. In general, both studies come to the same conclusion that investors interested in cryptocurrencies should be very careful and research any investment opportunity well. National regulatory authorities should strengthen the control of investment schemes to protect investors from fraudsters and maintain market stability.

Thus, the aforementioned studies investigate certain aspects and types of modern pyramid schemes in different countries, but in the vast majority of cases they do not provide a generalised picture of the phenomenon and to a lesser extent resort to its criminal law characteristics. These studies focus on the illegality and criminalisation of the act, but in each country separately. This research summarises the various aspects of the subject and compares the liability and approach to it in different countries.

Conclusions

Thus, the study provides a criminal law and forensic characterisation of crimes related to the creation and management of pyramid schemes and describes the typology of such a phenomenon as a pyramid scheme, its personal and parts. The author describes the main historical moments of the emergence of the first pyramid schemes and examines the most famous of them. The study analyses the criminal legislation of the Republic of Kazakhstan, Russia, the United States of America, the People's Republic of China and the Federal Republic of Germany concerning liability for creating and organising a pyramid scheme and identifies differences in approaches and practices in each country.

The study analyses the statistical data of the Republic of Kazakhstan on registered crimes of organising and managing a pyramid scheme, as well as statistics on closed criminal proceedings under this article and those referred to court. As a result, Kazakhstan was characterised by many open cases under Article 217 of the Criminal Code of the Republic of Kazakhstan in 2021 compared to 2022 and 2023. The author describes the peculiarities of pre-trial investigation of this category of crimes related to the creation and management of pyramid schemes. This made it possible to identify problems and obstacles in the investigation of such crimes, as well as to make proposals for improving the investigation process. As a result of the criminal law, forensic and comparative analysis, the author provides recommendations on amending the wording of Articles 217 and 217-1 of the Criminal Code of the Republic of Kazakhstan. It is proposed to include in Article 217 the wording regarding the use of business activities by a pyramid scheme to cover up illegal schemes. It is also proposed to add a separate corpus delicti to Article 217-2, which will establish liability for the creation and management of a pyramid scheme using the Internet, information and telecommunications technologies and electronic payments. At the same time, it is proposed that Article 217-1 should also provide for liability for knowingly advertising a pyramid scheme.

The study is of practical importance as it provides important and relevant conclusions for legislators and law enforcement agencies on the issue of crimes related to the creation and management of pyramid schemes. The study provides practical recommendations on the investigation and peculiarities of pre-trial investigation. The overall result of the study is an in-depth understanding of the criminal law aspects of pyramid schemes and their impact on financial stability. Thus, the goal set at the beginning of the work was achieved. For a more in-depth study in the future, it is necessary to investigate in more detail the phenomenon of modern Internet pyramids and network marketing, as well as to consider the practice of the authorities and special bodies in combating financial pyramids.

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Conflict of Interest

None.

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Аналіз кримінального законодавства щодо відповідальності за створення та управління фінансовими пірамідальними схемами в окремих країнах

Талгат Ханов
Карагандинський університет Казпотребсоюзу
100000, вулиця Академічна, 9, м. Караганда, Республіка Казахстан

Алемхан Майтанов
Карагандинський університет імені Букетова
100024, вулиця Університетська, 28, м. Караганда, Республіка Казахстан

Ахметкалі Шаймуханов
Карагандинський університет Казпотребсоюзу
100000, вулиця Академічна, 9, м. Караганда, Республіка Казахстан

Анотація

Актуальність. Злочини, пов'язані з інвестиційними (фінансовими) пірамідами, становлять загрозу державній стабільності та економічній безпеці як країни, так і окремих громадян. Актуальність дослідження зумовлена необхідністю забезпечення ефективної протидії цьому явищу в сучасних умовах.

Мета. Метою дослідження є аналіз кримінального законодавства Сполучених Штатів Америки, Німеччини, Китаю та Росії щодо боротьби з фінансовими пірамідами для розробки пропозицій щодо подальшого вдосконалення законодавства Республіки Казахстан з цього питання.

Методологія. Використано аналітичний, порівняльний, статистичний, правовий та догматичний методи.

Результати. Автори провели порівняльний аналіз положень кримінального законодавства Казахстану та інших юрисдикцій, дослідивши різні способи кодифікації відповідальності за створення та функціонування фінансових пірамід, включаючи різні форми, підходи та методи, що застосовуються в законодавчій базі. Виявлено спільні та відмінні тенденції та розроблено рекомендації щодо вдосконалення законодавчої бази у цій сфері. Надано криміналістичну характеристику злочину створення та організації фінансових пірамід. Досліджено статистичні дані Республіки Казахстан щодо цього виду злочинів. Крім того, визначено критерії, за якими має здійснюватися попереднє розслідування цієї категорії злочинів, що сприятиме більш ефективному розслідуванню та притягненню винних осіб до кримінальної відповідальності.

Висновки. Це дослідження сприяє поглибленню наукового розуміння теми та вдосконаленню законодавства. Результати дослідження можуть бути використані правоохоронними органами, законодавчими органами та науковою спільнотою для розробки та вдосконалення правових норм і процедур, пов'язаних з протидією фінансовим пірамідам.

Ключові слова: інвестиційні маніпуляції; історичний розвиток; порівняльна характеристика; економічні правопорушення; досудове розслідування.