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THE FRAUDULENT PHENOMENON OF THE FINANCIAL PYRAMIDS IN THE FINANCIAL INDUSTRY

Natalia Ślusarek*



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Abstract

The purpose of the article is to present the fraudulent behaviour observable in the financial industry, which is the financial pyramid phenomena, through a detailed description of such occurrences together with the damage and consequences generated. This paper will include a solid piece of knowledge about this behaviour, and will also distinguish the similarities and differences between financial pyramids.

Methodology of this paper is the critical analysis of the literature and comparative analysis of selected pyramids according to the criteria to compare and distinguish similarities and differences.

Results of the research confirm that the phenomenon of the financial pyramids is very harmful to the financial industry but also to the participants and society as a whole. The losses generate every year are enormous, but on the other hand, there is suffering of the victims as well. To conclude, the financial pyramids are inseparable elements of the financial industry and moreover, they are very dangerous and destructive. The knowledge of the specificity of pyramids increases the safety of financial consumers in the financial market.

Keywords: financial pyramids, financial crime, financial abuse, financial fraud, Ponzi schemes.

JEL Class: G29, D18.

^{*} Licencjat, Uniwersytet Ekonomiczny w Katowicach, e-mail: n.slusarekk@gmail.com https://orcid.org/0000-0002-2720-4236

INTRODUCTION

In current times everyone needs money to be able to satisfy their basic needs, that is why people work and earn money. In some cases, human greed for chasing money and gaining as much as possible could blind the real values which are important in life.

According to the research concerning human greed and moral manners, authors describe human greed as an unreasonable desire for more than necessary or deserved, not for good of the community, but for one's selfish interests (Nnatu et al., 2018). That kind of behaviour among the people leads to enormous problems in financial markets around the globe, which are simply financial crimes, frauds, and abuses.

Nowadays, it can be stated that the phenomenon of financial crimes, fraud, and abuses is an integral part of financial markets. Due to this fact, the scale of this phenomenon is enormous, and losses can be observable as a colossal amount of money. Moreover, it is impossible to calculate the actual losses in the fraudulent world of financial markets due to the fact that various forms of cheating and deceiving people exist (Ryder, 2011: 11). That brings another problem connected with this phenomenon that is financial pyramids. They are the most important and dynamically developing on a large scale in the fraudulent financial world. Therefore, it can be stated that the scale of losses in financial pyramids is the most severe and harmful in its consequences.

According to the review released by the SEC between 2009 and 2010 based on 31 complaints against the Ponzi fraud scheme, which is one of the kinds of financial pyramid scheme, the scale of the alleged scams ranged from 800,000 dollars to 8 billion dollars. The number of investors suspected of cheating ranged from 12 to over 800, and the average potential loss was 867,522 dollars per investor (Nichols, 2011). As it can be observed, the losses were calculated in millions of dollars. It only confirms how much the pyramids harm all financial markets and mostly the individuals themselves.

The goal of this research is to present the phenomena of the financial pyramid including its features and mechanisms. Additionally, the analysis will be held in order to better distinguish similarities and differences between chosen pyramids. Due to the fact that even financial pyramids have a very similar mechanism and operate in the same way, the creators often change some of the elements. It depends on the intention that stands behind fraudsters and what they want to achieve.

A piece of solid knowledge about the fraudulent phenomena at a significant level can contribute to avoiding such schemes in the future. Furthermore, it also helps in the identification of fraud based on the mentioned criteria.

1. FINANCIAL PYRAMIDS AS A FORM OF THE FRAUDULENT PHENOMENON

The financial pyramids are an inseparable part of the financial industry, as any kind of financial fraud, abuse or crime. Nowadays, the problem is even bigger due to the development of technology, and consequently the creation of new ways of deceiving people. This kind of financial scam became a worldwide phenomenon which every year generates enormous losses and ruins people's life.

In this section, to deliver the basic knowledge and bring closer to the problem, the history of this timeless occurrence will be presented together with the definitions from literature, mechanism, types and classification.

1.1. The history of the Pyramid Schemes

The financial pyramid, considered to be the starting point in the history of the financial pyramids of fraudsters is the Ponzi Scheme. People often use the term Ponzi when they think of snowball systems. In 1920, Charles Ponzi came up with the idea of founding a company in Boston. He founded the Security Exchange Company, which enabled him to generate more than a million dollars a week from investors (Bichler et al., 2013). Ponzi guarantees its customers a 40% refund within ninety days. After some time, when his business seemed to be flourishing, he promised investors even higher interest rates. After the change, the prices were 100% for 90 days and 50% for 45 days. No wonder many Ponzi people wanted to invest because of the promising large amount of money customers were able to receive. Charles Ponzi decided to deposit money into a joint savings bank, which became a significant deposit, and then he chose to be president of the bank (Watkins, 2005). He has developed a long-term diagram, a pyramid scheme, to put it more precisely. A few months later, the Boston Post published an article challenging Ponzi. As media criticism of Ponzi and his activities increased, he decided to make his books available to an accountant. The books, of course, showed his deception. The newspaper also revealed that he was convicted and imprisoned for forgery and smuggling in the United States and Canada (Zuckoff, 2005: 8). Even if the newspaper had not exposed Ponzi, it was only a matter of time before he would not be able to pay later his investors. Charles Ponzi cheated his investors on 15 million dollars since he started his business (Borowski and Wieckowska, 2020: 424–425). He was arrested on August 12, 1920. He confessed to the crime and spent about 14 years in prison (Hinson, 2013). The story of Charles Ponzi and his scheme echoed widely worldwide, and Ponzi's name calls for all similar schemes. All frauds which are connected with sourcing money from investors to pay older investors are called "Ponzi schemes".

However, Ponzi was not the first person who committed that kind of fraud. The first case that suits the Ponzi scheme was noted back in 1899. The man from Brooklyn, William Miller, also built the pyramid scheme. He was at first an investment adviser in Brooklyn. He started a credit rating by repaying his own debts. Next, he set up Franklin Syndicate (Morton, 2021). Miller promised his investors 10% of interest on subsidies each week. The swindler managed to gather 1 million dollars, 25 million dollars in today's money. After that, he was convicted to 10 years in prison, but he was released after five years (Skarda, 2012).

What is more, even before the fraud of William Miller, there were the other ones that were also pursued as financial pyramids. In 1837 Joseph Smith decided to start his company, Kirtland Safety Society in Ohio. Originally, the company was to operate as a bank for the Church society. Nevertheless, the authorities refused to grant a banking license. Consequently, it took a form of a joint-stock company. In November 1837 the company failed due to low equity and panic in the financial markets that was observable in that time. Kirtland Safety Society went bankrupt and caused a big scandal because of the bad management of financial sources. Seventeen lawsuits were brought to Smith and his shareholders (Borowski and Więckowska, 2020: 424–425).

After all, it could be stated that famous Charles Ponzi was not the first to build a pyramid scheme and deceive many people. There were the other ones nearly one hundred years before. However, Ponzi's name went down in history, and every thread in which fraudsters promise enormous and, in most cases, impossible to achieve, the rate of return and used new investors' money to pay back older investors is called the "Ponzi scheme". The association with Charles's surname and financial pyramids may be caused by the well-known worldwide as one of the biggest frauds globally and one of the first ones. Almost 200 years later, the phenomenon of pyramid schemes is still observable. It appraises as an easy way to trick people into pyramid schemes, especially when founders promise high rates of return. It is one of the reasons why the pyramid scheme has been trendy since the 19th century. People believe in unreasonable profits with shallow risk from a business that often does not exist, and arises from an unrevealed idea (Lewis, 2012: 294).

It was a short history and development of such a fraudulent scheme as it is a financial pyramid. Pyramid schemes are derived from the United States and started long ago. However, it has existed till now on a bigger scale all around the globe. Here are examples of the most prominent contemporary financial pyramid schemes.

Bernard Madoff has developed the most extensive financial pyramid scheme in the world. On the 10th of December 2008, he admitted to the fraud. He built the largest pyramid scheme. The losses were estimated at 65 million US dollars, and Madoff was sentenced to 150 years in prison. The Russian company, MMM

developed the following scheme. The scheme included up to 40 million victims, in total, losses were estimated at nearly \$10 billion. However, the MMM pyramid offered a return of 1000%. The pyramid scheme which affected the whole country was established in the 90s in Albania. Financial pyramids and government officials dominated the primitive financial system. About two-thirds of the population invested in that fraud. Overall losses were estimated at 1,2 billion dollars. The most extended pyramid scheme in the USA, which lasted 20 years, was created by Lou Pearlman. The total damage amounted to about 500 million dollars (Monkiewicz et al., 2020: 54–57).

1.2. Definition and mechanism of the financial pyramid

In the literature, the definition of the financial pyramid has various descriptions and meanings. It is due to the fact that there is no main characterization that can be used through financial markets. Also in every country, the sensation of the financial pyramid is perceived differently. The national regulations vary widely on how to name or describe a procedure that meets the characteristics of a pyramid scheme, generally providing for the full description of the phenomenon and limited to a general prohibition for particular conduct that conflicts with an authorized operation and could lead to the deception of the investing public and the consequent loss of their investment (Cunderlink, 2011).

According to the NASDAQ, the financial pyramid is a risk structure that divides the risk of investors into low, medium, and high-risk companies. Most assets are safe and low-risk investments that offer a predictable return. At the top of the pyramid are some risky ventures with little prospect of success (Nasdaq.com 2021). It can be perceived as an overall description of fraudulent financial schemes. Another one states that a financial pyramid is an organization in which one person's profits are directly dependent on the profits of those lower in the pyramid structure. In this scheme, the people responsible for such a project will entice other players to participate in these activities, when in reality, it will bring them results, but not real investment services (Pachucki, 2016: 7). The pyramid system directs to a business model in which components are recruited through guarantees of payment, or service to involve others in the plan, rather than offering investments or selling products (Feng et al., 2019: 4370). These definitions are one of the many presented in the literature, which shed a light on the general perception of the financial pyramid phenomenon.

Financial pyramids are very successful because of a lack of transparency in savings and investment products markets. The overall idea of this fraudulent scheme is to find inexperienced customers who agree to invest in the scheme. It is said that people are more altruistic towards those closest to them, or to whom

they feel close. It is often aimed at specific groups such as religious, ethnic, and racial ones. Recruiting from a trusted social network can reduce scepticism and increase a sense of duty or loyalty to the group and its members (*Pyramids, Ponzis and Fraud Prevention: Lessons from a Case Study*, 2017).

That brings up another thoughtful thing, the question why people really want to invest in such schemes. The promise of huge rates of return in a short period of time is one thing. Another important factor is the lack of knowledge among the investors. Most individuals that want to invest their money are looking for the best option which includes the conditions and returns presented in the offer. The founder of such schemes are aware of investors' unawareness and use it in their activities. In some cases is hard to detect if the investment is a scam or not. On the other hand, there are some people who exactly know that they invest in a financial pyramid scheme but due to their greed, and the opportunity to gain a lot of money, they decide to invest with the hope that the investment will last long enough to receive profits (Ny.gov, 2022).

The mechanism of the pyramid scheme is to attract as many participants as possible through their founders, who pay them money, encouraged by the promised profits. Organizers usually encourage pyramid participants to hire more staff. Companies that build their business on the basis of a pyramid system do not invest money. They pretend to be investors in order to conceal their true nature and the fact that the profits of the participants come mainly from the contributions of other members. In practice, financial services are rarely provided (Zarzycki and Zarzycka-Bienias, 2020).

1.3. Types and classification of financial pyramids that help in the identification of the fraudulent scheme

Due to a wide range of snowball systems, this phenomenon has many species and classifications based on different criteria. It also depends on different conditions, for example, a target group, functionality, distribution, and others.

Financial pyramid systems can be divided according to the type of business activity. As a rule, companies acting as fraudulent financial systems operate in secrecy as banks, insurance companies and investment firms. They are therefore legally registered with the respective institutions. Also, another category of pyramid schemes can be distinguished as those that are registered abroad, or are not registered in any register. These are companies that operate illegally on the market (Federal Trade Commission, 2013).

Piotr Masiukiewicz developed the example of the classification of financial pyramids in his book about financial pyramids. His classification is based on the types of the customer relationships, operating ranges, distribution networks, and

the last transparency of functioning. This classification consists of key factors that influence the overall financial pyramids and can be helpful in detecting fraud. When it comes to types of customer relationships, this can help you determine how you are gaining customers or victims of pyramid schemes. The criteria below relate to activities that can be distinguished between gainful and non-profit activities. The second categorization is broken down into the geographical scale of the operational area by local, national and international ones. The third category separates the phenomenon of financial pyramids depending on the distribution network. It shows you how to provide services to your customers, this can be done via your own customer service point or the Internet. The last classification of this parallel concerns the transparency of transactions. It can be distinguished into the pyramid whose activity is well-known in the market and associated with powerful, committed companies (Masiukiewicz, 2015: 18).

There are also typical features of financial pyramids that make it possible to distinguish them from the mass of other companies and organizations. They include lack of any information about the company's financial situation, no tangible assets of its own, or other high-value assets and failure to accurately identify the organization's activities and sources of income (Anzhu and Pshenichnikov, 2017). This kind of signs differentiates financial schemes, and it is better to distinguish them from other financial investment activities.

Except for the classification of the financial pyramid, they are also divided into types. Financial Intelligence Centre (FIC) is differentiated into two categories due to the money-making formula. In their research, they are financial pyramids that are product-based and non-product-based. As the name suggests, productbased Pyramid schemes are connected with selling products to the participating persons. The definition states that "participating persons not only contribute funds to a person(s) identified at the top of the pyramid but are also encouraged to sell products associated with the person(s) at the top of the scheme. These productbased pyramid schemes are often disguised as "business opportunities". The following one, named non-product-based pyramid scheme, defines activity connected only with investing funds. The definition is as follows: "Participants contribute funds only to a person(s) identified at the top of the pyramid, with no products being sold. These schemes constantly require new members for profits to be realized. This drives existing members to keep recruiting new members as that results in more revenue from various forms (membership fees etc.)" (FIC, 2018). Due to these types, it is only concerned with the operational activity of the scheme.

Other kinds of fraudulent schemes are explained in a paper concerning the analysis of financial pyramids. The first distinguished type is the "Eight Ball" Model. A scheme using the "Eight Ball model is a simple variation of the financial pyramid. This scheme, although at first glance it seems quite limited, in case of

successful implementation transforms into two schemes that transform into four schemes, and so on. While in other financial pyramids, the number of people involved in one system grows exponentially, in the case of this model, the number of systems themselves grows exponentially to the point where they stop sharing and become "lifeless" cells. The "eight ball" model is peculiar because, at some point, the leader leaves the game, handing over their position to other participants, who make an eightfold profit concerning the initial investment, in contrast to the astronomical profits obtained by the organizers of successful classic pyramids.

The next type is a scheme using the Network Marketing Model. The pyramidal nature of such systems is masked as network marketing, which is designed to sell a specific product to customers. This means that customers become agents in this system and have some profit from recruiting new buyers. Network marketing is a reasonably prevalent business scheme in today's world that is especially effective when applied in a virtual environment through modern telecommunications. In light of this factor, scammers use the advertised product to hide the pyramid scheme they are running. In particular, a new element is added to the classic financial pyramid scheme — an inadequately high payment for a product of little or no value, with the buyer becoming the agent and empowered to recruit new customers. Specific tangible and intangible characteristics are then attributed to the product to justify an inadequately high payment.

Besides these two types, another one is Matrix Scheme. In a Matrix Scheme, a waiting list is created in which the person at the top of the list, who is not necessarily the organizer of the program, gets the desired result provided a certain number of new participants join the list. The program's promoter makes large profits without making any investments because the sum of contributions from new participants is always more significant than the sum of payouts to successful new participants. Organizers can make much more profit if they fill the waiting list with fake names until actual participants arrive. This is similar to pyramid schemes masquerading as network marketing (*Analysis On Pyramid Schemes*, 2013).

2. THE BIGGEST FINANCIAL PYRAMIDS IN THE WORLD

The financial pyramids have a long history in the financial industry, together with many cases and created schemes. As it was presented before, the first cases of this issue appeared around the 1900s and after such a long time of existence, there were endless schemes created. In this chapter, three financial pyramids will be described, which are considered to be one of the biggest in the world, with huge losses generated. Bernard Madoff, Sergei Mavrodi and Allen Stanford were the creators of these schemes. Fraudulent schemes caused enormous damage not only to money but to people as well.

2.1. Bernard Madoff

Bernard Madoff was a well-known financial industry figure, particularly on Wall Street. He formed Bernard L. Madoff Investment Securities LLC, a market maker, in 1960 and later helped to construct the NASDAQ stock exchange. He served on the National Securities Dealer Association's Board of Directors and advised the Securities and Exchange Commission on securities dealing (Yang and Kay, 2021). In the 1990s, Madoff's brokerage handled between 10% and 15% of all orders on the New York Stock Exchange (NYSE). Madoff was also a major donor to Democratic Party candidates in the United States (Corporate Finance Institute, 2020). He was trustworthy because of his position in banking and investing, which is why he ran such a large Ponzi scam. Unfortunately, investors were enthralled by his financial skills and Wall Street status, and they believed him without doing a thorough examination of his business. Madoff served as the "face of the pyramid" in this fraud. Madoff's swindle attracted investors because of his position and experience.

Madoff scammed his investors by handing out huge returns from his own or other investors' money without actually, or effectively profiting. In two decades, Madoff defrauded about 65 billion USD from over 40,000 people in 125 countries. His pyramid was thought to be the longest and largest in the history of the United States. The entire scheme lasted 17 years or possibly longer; the exact start date of his financial pyramid is merely a guess. According to the court records, he testified at trial that the scam began in 1991 (Investopedia, 2022a).

This scheme worked in a similar way to Charles Ponzi's. Madoff offered investors a ten percent annual return on investment. Investors trusted Madoff's enterprise and put their money without hesitation. He did not charge any administrative or service fees, instead of charging a market commission for each transaction. As can be seen, Madoff's scam had a highly deliberate mechanism, and he only involved people who were close to him and trusted him. Another interesting truth is that Madoff was extremely discreet. He avoided seeing people, going to his office, going through his records, and discussing his operations in depth. In addition, he lied about his investment approach (Fuerman, 2009).

Madoff's investors wanted to withdraw their money in 2008 owing to the financial crisis, after years of operating a profitable scheme with billions of dollars in revenue. It was a pivotal point in the collapse of the pyramid scheme. Several investors enrolled in the fund and requested a withdrawal of \$7 million, including earnings. The fund, it turns out, does not have that amount. Then, it was revealed that Madoff's business was a Ponzi scam, with profits financed by deposits from new consumers (Rosik, 2020). Madoff admitted everything when the scheme was discovered. He was apprehended, charged, and put on trial. He was charged with

eleven counts and a unique succession of offences throughout the years by the court. For his crimes, he was sentenced to 150 years in prison (Ramage, 2020).

Madoff's largest scheme also unleashed enormous consequences for deceiving people and the financial market. After the failure of the Securities and Exchange Commission, it decided to improve its regulations and processes against that kind of fraud. The transposition is called "The Securities and Exchange Commission Post-Madoff Reforms" due to the circumstances of creation. The official announcement about improvements is described as: "...comprehensive steps to reduce the chances that such frauds would occur or be undetected in the future" (Sec.gov., 2019). It can be concluded that in this situation when fraud prevention measures were improved, it was a positive consequence of Madoff's scheme.

When it comes to Bernard Madoff's fraud victims, the scale was massive, and a wide range of people was scammed. Individuals, charities, trusts, pension funds, and hedge funds were among the victims. Because Madoff was a Jew, many of his clients were Jewish, including Jewish charities. Nonetheless, Madoff's investors included celebrities, business leaders, athletes, politicians, and even professors from prestigious colleges (Anderson and Fox, 2009).

For many of the sufferers of this investment, the effects extend beyond financial loss to include negative media coverage and, in some cases, public humiliation. Aside from the anguish and suffering caused by financial loss, the victims must also deal with continual reminders of the scandal on television, in newspapers, and in magazines (Goldstein et al., 2010).

Furthermore, most victims have only compensated a portion of the money invested in Madoff. The victims received almost 18 billion dollars, according to the most recent figures from 2021. When compared to the total financial harm of almost 65 billion dollars, the sum recovered is not that significant. The Justice Department and other institutions are still pressing for higher compensation for victims (Stempel, 2021b).

Because of the vast amount of financial losses, Bernard Madoff's pyramid scam is the greatest and most spectacular pyramid in history. Many people believe Madoff is a genius since he meticulously completed his work. His pyramid was also effective because of his financial market position and notoriety; without both, he would have had a tougher time attracting consumers.

2.2. Sergei Mavrodi

Sergei Mavrodi developed the MMM pyramid scheme in Russia in 1989. It was meant to be a computer import firm at first, but he transferred it to the investment fund. The MMM fraud was stopped by Russian police in 1994 after millions of victims had already suffered significant financial losses. The MMM financial pyramid was Russia's most important investment fund.

Sergei Mavrodi, the scheme's chief architect, was a Russian businessman. He was always interested in numbers and decided to pursue a profession in business and money at a young age. He was arrested in 1983 for multiple financial crimes while working for a minor company, prior to the largest fraud of his career.

He founded the MMM company in 1989 with his brother Vyacheslav Mavrodi and Olga Melnikova. MMM is made up of the first letters of each of the founders' surnames (Tapalaga, 2021).

Mavrodi joined the Russian market with his lucrative high-income firm at a time when money was king in the Soviet economy. Furthermore, in comparison to the West, pricing was mostly controlled by the government. Due to the uncertain availability of things, it was a normal practice to accumulate both items and money (Tolstikova, 2022). As a result, Russians opted to invest in order to face reality. That is one of the reasons for the Russian society's naivety in investing in Mavrodi's firm. Since Sergei Mavrodi was well acquainted with the scenario, he was able to develop, develop, and deceive a big number of people. The fact that Mavrodi was "the face of the pyramid" was another important aspect of the institution's success. By the year 1990, he had become one of Russia's wealthiest men.

Mavrodi's finance strategy did not have a sophisticated process. It was simple to attract new clients by placing large-scale advertisements in public places and on television. MMM claimed a 50 percent yearly return, and advocates hailed it as a novel method to gain money quickly. Others claimed it was a Ponzi scheme. The MMM scheme gathered 15 million people who invested in his Ponzi scheme in a short period of time. The investors who were among the first to enter the MMM financial pyramid won money when it crashed. The remainder of them, however, lost their money (Schiffauer, 2018: 58–71).

Mavrodi's firm was regarded as one of the shadiest investment firms, and it has never disclosed its profits or investments, nor the nature of its business (Tolstikova, 2022). Despite this, many people were investing in the hopes of making a profit.

It was that point in 1994, after months of running a fraudulent pyramid scam, when the majority of investors had no money to pay out. Mavrodi was arrested for tax evasion at the same time. Nobody seemed to care about the MMM's tax operations, despite the fact that it was the most well-known investment fund and had been operating for months. It was brought about through a deal with Russia's government. Because most public firms were privatized in the 1990s, Mavrodi and other entrepreneurs were tasked with recouping lost revenue. That is why they accepted bribes from entrepreneurs. According to reports, Mavrodi was arrested and charged with tax evasion since the amount of money provided to the government was insufficient (Kagarlitsky, 1994). It may appear perplexing why Mavrodi was not charged with running a pyramid scheme, but financial pyramids were permitted in Russia at the time, thus Mavrodi was charged with tax fraud.

Mavrodi became a national hero after his arrest because most people saw him as a victim rather than a fraudster. Russian residents were split into two groups: those who backed Mavrodi and saw him as a victim, and those who believed he was a scammer who ought to be prosecuted (Sinelschikova, 2022).

Mavrodi was not penalized after that since he successfully joined the parliament. As a result, he escaped penalty and accountability for his actions. Mavrodi was stripped of his parliamentary immunity in 1996, but he fled into hiding and was apprehended in 2003. Overall losses from the MMM fraud scam are believed to be in billions of dollars. He was found guilty of fraud and sentenced to 4.5 years in a prison colony by a Moscow court in 2007 (Partridge, 2020).

Of course, the MMM fraudulent investment results in significant losses for victims, but there are also good consequences. The large wealth earned by the corporation as a result of executing the Ponzi scheme in Russia had a good impact on hyperinflation. It means that in Russia, a single business was in charge of inflation. Political unrest was another key result of Mavrodi and his co-strategy. The MMM Investors Union was founded by his trailers to assist Mavrodi and support him in his fight against the authorities. It was triggered by Mavrodi's trailers' conviction that the government was to blame for not receiving their money back, while it was entirely Mavrodi's fault. Some even stated that they voted against the government (Tolstikova, 2022).

As it can be seen, the Mavrodi phenomenon in Russia in the 1990s was massive. Despite defrauding so many investors, he convinced them that he was a victim. Pensioners, single women, and students were among the MMM's victims, as were people who did not have a steady income and, on the other hand, wealthy people who wanted to earn more. Following the financial pyramid's collapse, at least 10,000 people went bankrupt, and 50 committed suicide (France24.com, 2018). Mavrodi pledged to reimburse the investors, but he never did. The amount of money recovered by victims is unknown.

2.3. Allen Stanford

Robert Allen Stanford has created a Ponzi scheme worth \$8 billion. Guardian International Bank, a private offshore bank situated in Montserrat, was formed by him in 1985. Stanford relocated the bank's headquarters to Antigua in 1989. Stanford Group's activities included Stanford International Bank and Stanford Group Company, and his company works in about 136 countries. Stanford also had a partner, James M. Davis. He is said to be America's second-largest financial fraud behind Bernard Madoff. A Texas financier named Robert Allen Stanford. He worked as an insurance agent, accountant, and investment manager at the beginning of his career. He was one of America's wealthiest men in 2008, with a fortune estimated at 2.2 billion dollars (Investopedia, 2022b).

He was regarded as a serious businessman as a result of his fortune. The creator is seen as the "face of the pyramid", similar to Madoff and Mavrodi. People trusted him because they aspired to be as wealthy as Stanford. However, he did not need to market his venture to attract investors; individuals flocked to him with the expectation of making a lot of money. Although Stanford's business was lawful, the truth is it was not, however, the Securities and Exchange Commission approved Stanford Group Company as an investment consulting firm.

Stanford served on the Investment Committee and as Chairman of the Board of Stanford International Bank. It has made decisions about the revenue and assets that are reported to investors. He was in charge of reviewing the Bank's financial statements and operations, as well as facilitating transactions between the Bank's other companies. James M. Davis may be described as his right-hand man, and on the other hand, was in charge of the bank's investment decisions as well as other aspects of the company's financial status (Walsh and Spalding, 2012).

The system's mechanism was simple: Stanford supplied high-yield bank certificates. He promised the customers that buying his credentials and investing in them was risk-free. Stanford further informed investors that the certificates of deposit are backed by liquid instruments traded on national foreign exchange exchanges. The fact, however, was quite different. Indeed, the capital contributed by investors was utilized to pay interest and refund prior deposit certificate holders. The scheme's technique was strikingly similar to the Madoff fraud, although it involved a bank rather than a hedge fund (Mullenix, 2013). Stanford provided his customers with a nearly 10% rate of return, which was high when compared to other banks, such as those in the United States. In the early 2000s, the average rate of return offered by banks in the United States was roughly 3%. (Lamare, 2021).

As with any pyramid scheme, after more than 20 years of fraudulent investments, there comes a point where there isn't enough money to pay out all investors. As a result of the investigation, the SEC filed charges against Stanford's company in 2009 and they ordered the company's assets to be frozen. The Stanford fraud system is thought to have resulted in total losses of USD 8 billion, with around 18,000 victims (Zweifach and Khan, 2010). The SEC was accused of distorting the warning flags for the Stanford transactions in the 1997 report, the same as it was in the Madoff case. They were able to investigate and bring Allen Stanford to trial after more than ten years. Initially, the suspected fraudster refused to confess, claiming that his actions were entirely legal. As a result, the service was discontinued in 2012. Allen Robert Stanford was sentenced to 110 years of high security in Florida and ordered to deprive victims of approximately USD 5.9 billion by a federal oath in Huston (Cohn, 2019).

There were many different types of persons among the 18 thousand people that were duped by Stanford. His victims are primarily pensioners and those who intended to invest their funds and get profits that would allow them to live well in retirement. People were understandably devastated when the truth was revealed. Their entire life savings had vanished. It had a significant influence on their life (Kenney, 2021). Stanford's enterprise affected also the Caribbean society, in addition to the negative implications for the victims. Thousands of people were laid off after Stanford's Antigua firm collapsed, as it was the island's largest private employer. Another difficulty is that they were left with insufficient funds to meet all of their financial obligations. In addition, Antigua's overall reputation suffered.

The good consequences, on the other hand, may be seen because Stanford erected new offices, many places to work, and a new hospital. Over 70% of the Caribbean's economic activity came from his business operations, but the country slid into financial trouble after the crash (Davis, 2012). The Stanford hoax resulted in the Caribbean becoming a wealthier country with a strong economy. In victims' cases, however, many people were left without a source of income and life savings.

Victims of a collapsed Stanford fraud operation will receive \$1 billion in compensation over 12 years later. Institutions are still seeking to recover additional money, as they were in the case of Madoff. According to Kevin Sadler, one of the people involved in the recovery, a one-billion-dollar recovery is a tremendous accomplishment (Stempel, 2021a).

The Allen Stanford Ponzi scheme is just yet another major financial scandal in the United States. Many people compared his scheme to Bernard Madoff's largest financial pyramid in recent years. Of course, the losses were smaller than in the Madoff case, but the ramifications for the victims and the Caribbean society were massive. Allen Stanford's strategy is another illustration of the occurrence of financial pyramids, demonstrating how ageless they are in the financial system.

3. THE ANALYSIS OF CHOSEN PYRAMIDS

In this part, the analysis will be held according to the criteria presented at the beginning. The main purpose of this research is to distinguish similarities and differences among the financial pyramid phenomenon, which may be helpful in the acquisition of solid knowledge about it. Also, it will help with the recognition of other fraudulent schemes due to observable similarities. Even if financial pyramids belong to the same kind of scams and their mechanism is very similar, some of the differences between them can be observed.

For the purpose of this analysis, all criteria are included in Table 1 (Table 1) together with descriptions of all the pyramids presented in the previous chapter. Based on this table the analysis will be held.

Table 1. Criteria and descriptions of chosen pyramids

| Criteria | Bernard Madoff | Sergei Mavrodi | Allen Stanford |
|--|---|---|--|
| Origin of the pyramid | The scheme was operating under the company Bernard L. Madoff Investment Securities LLC, established in 1960. | The MMM company was founded in 1989, and at first, it was a business connected with importing computers. Then, it was changed to an investment company. | The scheme was operating under the Stanford Group Company, founded in 1989 |
| The face of the pyramid | Bernard Madoff was a well-known person in the finance industry, especially on Wall Street. He was also a member of the Board of Directors of the NASDAQ and advisor to the SEC. | Sergei Mavrodi was a Russian entrepreneur, who from a young age was interested in maths and finance. In the 1990s he was one of the richest men in Russia. | Allen Stanford was the founder of the Guardian International Bank and later on Stanford's Group which included two businesses: Stanford International Bank and Stanford Group Company. In 2008 he was one of the richest men in America. |
| Type of business activity | Brokerage company | Investment company | Bank |
| The way of attracting new participants | 10% of annual return, no administrative fee or service fees. | The rate of return is equal to 50%. | The rate of return is equal to around 10%. |
| The way of collecting money | Deposit of money by investors. | Deposit of money by investors. | Selling bank certificates. |
| Duration | 17 years or even more | Around 5 years | More than 20 years |
| Number of participants | 40 000 | 15 million | 18 000 |
| Estimated losses | 65 billion dollars | 1.5 billion dollars | 8 billion dollars |
| Recovery amount for victims | Around 18 billion dollars by the year 2021. | Mavrodi had promised his investors that they would receive their money back but such a thing did not happen. | Around 1 billion dollars by the year 2022. |
| Type of participants | Individuals include people from entertainment, business, sports, politics, charities, and also trust, pension, and hedge funds. | Pensioners, single women, and students, but also people who did not have a secure income and, on the other hand, wealthy people who wanted to earn more. | Victims include mainly retirees and people who hoped to invest their savings and reap returns that would see them safely through retirement. |
| Punishment for creators | 150 years in prison | 4.5 years in a penal colony | 110 years in prison |

Source: own study based on the 2nd chapter.

The first point of the examination is the method and overall features that attract people to invest, which are the most important aspects of such fraudulent schemes. The common practice in such schemes is to have "the face of the pyramid", which will be the trustworthy person and will attract participants. In all three cases, that person was the creator of the whole scheme with a respectful position in the financial industry and also reliable in investments. Also, another factor that will be valuable in acquiring new clients is the way of attracting them. As it can be observed, in every scheme there were encouraging investment conditions, which were competitive in the market.

At this point of research similarities among pyramid schemes are noticed in the way of attracting customers, along with the person that will be representative and gain people's attention through their personal experience and trust. Another significant analogy is offering conditions that are favourable and competitive amid other investment offers. Obviously, the difference is that each fraudulent investment has its own presented determinants.

The next criteria are connected with the conditions around the creation of a fraudulent scheme, the system for collecting money from participants, and the key to success. When it comes to the type of business under which the scheme was operated, Madoff had a brokerage company, Mavrodi an investment company and Stanford was the owner of banks. The way of collecting money from members was slightly different in the analysed cases. In Madoff's scheme people gave money to gain a lot of money from a high rate of return, the similar one was in the case of Mavrodi, due to the fact that both schemes were operating as investment companies. The Allen Stanford pyramid was selling the bank certificates with a very high rate of return.

From this part, it is clear that financial pyramids may operate under the different types of business, not only as investment companies. The other difference is the mechanism of the possession of assets from people interested in participating in such a scheme. As it can be observed, people not only deposit money to invest but there are also other ways of gathering money, for example, by selling bank certificates, as was in the case of Stanford.

The last part will cover the overall summary of each described financial pyramid scheme and its consequences, including the positive ones as well. All pieces of information are based on the second chapter of this article.

According to the inventor, the entire Madoff conspiracy spanned around 17 years, starting in 1991 and ending in 2008, when the fraud was revealed. The projected loss was roughly 65 billion dollars, with approximately 40 thousand participants in 125 countries. Nearly 13 years after the collapse of the pyramid, the victims were able to retrieve nearly 18 billion dollars. When it comes to the overall impacts of the system, aside from the financial losses suffered by the victims, such as savings, pension savings, college savings, and charitable gifts,

the trauma and humiliation were also evident. Many people put their life savings on the line. In addition, the failure of his company sparked concern on Wall Street because it was one of the largest businesses operating in the market. On the other hand, there are certain favourable impacts that can be identified. The SEC resolved to enhance its policies and practices related to such scams as a result of its blunders. After that, it may be a positive conclusion for the fraudulent world, and it could reduce a number of similar schemes in the future.

The MMM pyramid had a brief existence: it began in 1989 and ended in 1994. The total number of people implicated in the scheme was estimated to be around 15 million, with a total loss of \$1.5 billion. The consequences of this short scam were severe, as data shows that 10,000 victims became bankrupt and 50 committed suicides as a result of it. The exact amount of money retrieved is unknown. Due to the fact that it was the country's largest investment business, the scheme's entire collapse had an impact on the Russian economy.

Allen Stanford's financial pyramid lasted approximately 20 years. With 18,000 participants and losses estimated at \$8 billion, the event was a huge success. After 12 years, the victims were awarded a one-billion-dollar settlement. To begin with, the scam's positive effects were largely visible in the Caribbean. Stanford is responsible for 70% of Caribbean economic activity through his firm, and he also helped the country's development by expanding its infrastructure. He created numerous jobs, but when his building collapsed, individuals were left without a source of income. This had negative implications, such as people being unable to pay off their obligations. Another result was the Caribbean crisis, which was unsurprising given Stanford's disproportionate power over the entire economy. Victims' losses must also be remembered as a big number of people lost their savings.

CONCLUSION

The research presents the harmful phenomena of the financial pyramids. This is a wild spread problem, which dynamically develops on a large scale, causes huge financial damage, and also brings enoumous losses to victims as well. The main purpose of this article was to help with a better understanding of this problem and to provide the necessary knowledge which would be helpful in identifying such schemes. The detailed presentation of the history, definitions, mechanism and examples of financial pyramids which operated in the real life brings a clear view of fraudulent schemes and thanks to that, the chance of recognising them is higher.

Financial market participants should be very careful, as knowledge of the pyramids that have already been in operation may be useful, but not sufficient to avoid future losses. The creators of new pyramids can (and certainly will) try out

new "tricks" (schemes, solutions) and attract more greedy, insecure and uneducated investors. One of the most important safeguards against these risks is the effective provision of financial knowledge that enhances financial market participants' abilities and financial awareness.

As the similarities and differences between them were distinguished, it is also another helpful tool for the identification of financial pyramid schemes. Even if, they belong to the same kind of scams, they are quite different from each other, however, some of the elements are permanent. The constant elements can be observable in the structure of the mechanism of the whole scheme, the scenario is always the same. It means that the scheme has its own person responsible for attracting customers, together with the way of doing it. From this point when a business with a high and hard-to-believe rate of returns occurs on the market, it is strongly possible that it will be one of the financial pyramid schemes. Another crucial factor in recognizing such phenomena is to be aware that it may operate in various types of businesses, not only the one connected with investment. It is also worth paying attention to the origin of the company and its activity.

Afterwards, when it comes to investing it is better to consult an expert in this area, rather than make not thoughtful decisions, and later on, lost all of the money and suffer from consequences. However, as it can be stated from the analysis, people when seeing a good offer with great conditions of investment do not hesitate and invest money without further consideration of whether it is even worth it.

To summarize all the research, it can be stated that financial pyramids are very harmful to the financial market and society as a whole, even if in some cases the positive consequences are observable, the losses are beyond that. This phenomenon has a long history and did not stop occurring even after a hundred years. At the same time, it is working in a homogeneous way, the creators are changing some of the factors and that is enough to trick people again.

It can be claimed that the phenomenon of financial pyramids is timeless and it will be constantly developing through the years, due to the fact that human greed and a desire to be rich are irreversible elements of human behaviour.

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