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LEGAL ASPECTS OF THE "PUMP AND DUMP" SCHEME FOR MANIPULATING THE CRYPTOCURRENCY

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Abstract

The first "pump and dump" manipulation of the stock market was recorded in the 17th century. For the modern stock market, the most resonant were manipulations of the value of penny stocks by Stretton Oakmont and 13-year-old Jonathan Swan. Since then, both the exchanges themselves and the forms of manipulation by traders have undergone significant changes. ICOS that appeared in the XXI century have become a new alternative form for traditional markets. The cryptocurrency market has adopted not only the analytical and technical component of traditional financial assets, but also various manipulative schemes that have been successfully tested in traditional financial markets. One of them is the "pump and dump" scheme. The use of the pump and dump scheme in the cryptocurrency market differs from the use of a similar scheme in the traditional stock market. In our research, we found that most manipulations lead to short-term bubbles, where prices, volume, and volatility increase sharply and then quickly collapse. The duration of manipulation does not exceed a couple of minutes. With the increasing number of manipulations, regulators are also increasingly developing agreed rules and regulations to protect investors' interests from manipulation. Regulators and Central banks have expressed serious concerns about cryptocurrencies, with one of the main concerns being the prevalence of "pump and dump" manipulation in cryptocurrency markets. This study presents the results of studying the elements of the "pump and dump" manipulation scheme in the cryptocurrency market and its key components that affect the creation of regulatory mechanisms.

Keywords: Cryptocurrency, manipulation, overconfidence, pump-and-dump scheme

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1. Introduction

Over the past few years, technologies has changed the financial market almost beyond recognition. Quite naturally, the digital transformation that has been actively developing over the past decade has not spared the asset market. The emergence of cryptocurrencies and digital financial assets served as a catalyst for the development of a new capital market, different from the traditional ones. The market capitalization of digital assets is estimated at $ 454.31 billion (Coinmarketcap, 2020). Meanwhile, despite the "novelty" and alleged independence of digital financial assets from traditional economic institutions, the market for initial token placing (initial coin offerings, ICO), which is version 2.0 of the IPO market, continues to experience the same negative phenomena as traditional financial markets. Over the past 5 years, about $ 27 billion has been raised on ICO in the framework of 5727 projects (ICO bench, 2019). At the same time, 2017 was unanimously recognized by experts as the year of the ICO collapse. And the numbers of damage suffered by millions of depositors are comparable to the damage caused by crises on the largest stock or commodity exchanges. As a result, law enforcement agencies face daily cases of investigation of manipulations on the digital asset market. In its research, The Wall Street Journal (2018) analyzed several ICO projects that clearly saw the use of the "pump and dump" scheme to manipulate the market, as a result of which hundreds of investors were left with nothing. In a study conducted by Dhawan and Putnins (2020), it is noted that almost 15% of all tokens from their random ICO sample are manipulated according to the "pump and dump" scheme at least once in a seven-month period. At the same time, 355 cases of such schemes involve assets worth more than $ 350 million manipulations per day, from which manipulators make a profit of about $ 6 million. Undoubtedly, such activity could not pass the attention of regulators. However, in the absence of regulation in certain jurisdictions, the activity of their maneuvers is extremely limited.

2. Problem Statement

On the market of digital financial assets, where there are no strict requirements for traders, exchanges and companies whose tokens are traded, a favorable field is created for the use of criminal manipulation schemes. Despite the existing differences, the ICO market is in many ways similar to the IPO, which made it possible to apply criminal enrichment schemes that have been successfully tested on the securities market. One of them is the "pump and dump" scheme. In the absence of proper regulation by regulators, the use of the scheme has become very common. Regulators and Central banks have expressed serious concerns about cryptocurrencies, with one of the main concerns being the prevalence of "pump and dump" manipulations on cryptocurrency markets (ICO bench, 2019).

3. Research Questions

These circumstances together determine the urgent need to study the use of the "pump and dump" scheme on the cryptocurrency market, to determine differences from the "classic" scheme used on the securities market. The study of elements of the "pump and dump" manipulation scheme on the cryptocurrency market and its key components that influence the creation of regulatory mechanisms is particularly relevant in this aspect.

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The "pump and dump" scheme is far from new for traditional markets, and was focused primarily on penny stocks with low trading volume. In Frunza (2016) study, the following classification of "pump and dump" manipulation was given: manipulation based on actions that change the actual or estimated value of assets; information manipulation, which is the dissemination of false news and information among the investor community; trade-based manipulation, which is based on simple long and short trades, without taking any publicly observed actions to change the firm's value or publishing false information to change the price; order-based manipulation, which is a type of manipulation based on canceled or outstanding orders. Meanwhile, the "pump and dump" scheme used on the cryptocurrency market does not fall into any of the groups of the above classification, which makes it necessary to theoretically study its features that determine its distinctive features.

4. Purpose of the Study

The purpose of this study is to analyze the content elements of the "pump and dump" scheme on the digital asset market, which are similar and different from the similar market manipulation scheme used on traditional securities markets. To achieve this goal the author analyzed "cases" of manipulating scheme "pump and dump" on cryptocurrency and traditional financial market available scientific literature on the manipulation of traditional financial markets and scriptactives, as well as law enforcement and regulators on these symptoms, which allowed to identify the main elements of the application scheme, and the associated legal risks.

5. Research Methods

The main methods of this research are descriptive method, methods of observation, interpretation, comparison and generalization. In addition, theoretical methods of analysis, synthesis, induction, deduction, and classification were used. The author also analyzed the existing literature on the use of the "pump and dump" scheme on the cryptocurrency market. This provided the proper theoretical part of the study.

6. Findings

It is worth noting that in the scientific literature, a number of key studies can be identified on both the "pump and dump" scheme and methods of countering its use on the cryptocurrency markets. Some authors note the negative impact of "pump and dump" on the liquidity of assets and their prices (Li, Shin, & Wang, 2018), others have developed methods of predictive analytics based on 200 signals for predicting "pump and dump" on the cryptocurrency market (Xu & Livshits, 2019). Kamps and Kleinberg (2018), in turn, use market data to identify suspicious pump and dump based on sudden jumps in prices and transaction volumes.

Mirtaheri et al. (2019) use data collected from Twitter about cryptocurrencies for these purposes, cross-linked with the pump signal data from Telegram and market data.

Notably, in their work Mirtaheri et al. (2019) revealed the automation of tweets used in manipulations. In this aspect, the experience conducted by Krafft et al. (2018) is also interesting. They created bots that made transactions with non-illiquid tokens at 217 different cryptocurrency markets.

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Despite the fact that the researchers did not aim to manipulate the market, however, their bots created large fluctuations in the prices of individual tokens after very small purchases. Finally, Hamrick et al. (2019) devoted their research to factors influencing price leapes in cryptocurrency pump schemes.

The US Commodity and Futures Trading Commission (CFTC, 2018) public warning about cryptocurrency manipulation notes that such manipulations can damage the integrity of cryptocurrency markets and exhaust investor confidence in cryptocurrencies. The document also describes the implementation features of the scheme. For example, CTFC warns consumers to refrain from purchasing tokens based on tips received in social networks, which are widely hyped. According to Business Insider (2017), when organizing such scams, cryptocurrency traders often use the Telegram app for messaging. Their strategy is to suddenly inflate the value of a cryptocurrency by coordinating a group of interested buyers. For two weeks, Business Insider tracked pump-and-dump schemes for the UBQ, VCash, Chill Coin, Magi Coin, and Indorse cryptocurrencies. All actions took place either on the Bittrex exchange (USA) or on the Russian Yobit. The organizers of the "pump and dump" scheme thus reduced the vigilance of potential investors of victims of the scheme. As soon as the victims acquired assets, reacting to its growth, the organizers of the scheme began to "reset", after which the price fell, as a result, investors were left with tokens devoid of even nominal value. At the same time, it can take no more than 10 minutes from the beginning of manipulation to its end. A similar conclusion was reached by Dhawan and Putnins (2020).

The use of the "pump and dump" scheme on the cryptocurrency markets has a number of differences from the use of a similar scheme on the securities market. For example, on classical markets, targeted mailing of information about the growth of the asset rate via email is used for pumping, or brokers make personal calls to convince investors in the growth of the stock price (Loa et al., 2020). And the price growth is proportional to the growth of the number of trusted investors, that is, the method of information asymmetry is used.

In turn, on the cryptocurrency market, manipulation is carried out without addresses. In the "pump and dump" scheme used on the cryptocurrency market, the price of a penny asset, usually tokens with a low market capitalization, is artificially inflated using well-planned marketing. In September 2020, the SEC issued a warning for investors that information related to claims that the company's products or services will be used to prevent a coronavirus outbreak, which leads to an increase in token prices, was distributed in order to manipulate social networks and the media (SEC, 2020).

With the evolution of markets, the appearance of ICO, the ways used to spread false news have also evolved over time. Initially, newspapers and "boiler rooms" were the main tools for pumping. In addition, those who had privileged relationships with brokers could spread rumors among clients for large fees from exchange pumping. The emergence of social networks and bots has made it possible to spread false claims on Facebook and Twitter and distribute content extremely quickly (Frunza, 2016). As a rule, information is placed on popular resources in the form of advertising banners or a whole group of pumpers is working" (CFTC, 2018). Administrators of the pump group (manipulators) publicly declare that they are engaged in pumping of this token (issuing a "pump signal") and encourage others to join them. Having agreed on closed groups, traders begin to actively purchase tokens with low capitalization, thereby stimulating demand. False statements are also used, misleading statements, a large number of social media posts, joint signatures, and

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other tricks are used to communicate that a worthless asset is actually a profitable acquisition, thereby stimulating an increase in demand.

In the context of such an active use of such a scheme of manipulation of exchange trading, a number of questions arise: why is such manipulation open and so widespread, and why do we know practically no cases of prosecution for such attacks? Some experts see the answers to these questions as follows: 1) the possibility of cheap and confidential coordination of actions through social networks, such as telegram, allows manipulators to create anonymous groups that are difficult to track for law enforcement agencies; 2) the lack of an entrance barrier for token placement has led to hundreds of token placements being held daily, thereby creating favorable conditions for pumping; 3) the lack of regulation by crypto exchanges that receive a commission from the transaction, so the "pump and dump" scheme is in their hands; 4) the wait-and-see attitude of regulators and the desire to stimulate the growth of innovations (Hamrick et al., (2019); 5) cryptocurrency exchanges are insufficiently equipped to detect and prevent most forms of market manipulation, including "pump and dump"schemes. Thus, according to the Office of the New York State Attorney General (2018), none of the exchanges has adequate market surveillance methods to detect manipulation, and only two exchanges are working on implementing better surveillance tools. In the issue of legal regulation, only 2 exchanges distinguished themselves, which identified in the documents signs of actions that are manipulations. The lack of supervision from the exchanges may also be related to their desire to earn money by ignoring the fact of manipulations.

In regulated securities markets, the use of the "pump and dump" scheme has long been recognized as fraud and is prosecuted under the securities market regulation legislation. For example, the use of such a scheme on the London stock exchange or the New York stock exchange will undoubtedly entail criminal liability. However, on the cryptocurrency market, the use of "pump and dump" is not recognized as criminal in all jurisdictions. In most jurisdictions, in the absence of a transparent regulatory scheme and the uncertainty of the status of exchanges, such schemes are unethical and immoral rather than criminal (Thompson, 2018). At the same time, the number of law enforcement investigations into abuse on exchanges is growing, for example, the number of investigations by the British FCA into the cryptocurrency business increased from 50 cases in 2018 to 87 cases in 2019 (ICO bench, 2019).

The study allowed us to identify the following tools for combating market manipulation under the "pump and dump" scheme:

- extensive investor activities about the prevalence of the scheme;
- legal protection of consumers under the securities legislation,
- imposing requirements on exchange operators to detect and deter fraudulent activities, such as "pump and dump"schemes.

It is noteworthy that all these methods were the first to be actively applied by the US Securities and Exchange Commission (SEC), whose activities directly affect the ICO activities in the world. On a weekly basis, the SEC website provides information about current methods of manipulation on the cryptocurrency and traditional markets, and ways to combat it. Legal protection of investors' interests and suppression of the activities of exchange manipulators on ICO projects that have passed the Howie test is carried out in accordance with the legislation on the securities market. Thus, article 9 of the stock exchange Act of 1934 explicitly prohibits manipulating the prices of securities.

Despite regulatory control, the "pump and dump" groups on the cryptocurrency market have not stopped their activities. One potential reason for this is that most cryptocurrencies are traded on multiple exchanges around the world, which could lead to regulatory arbitrage. In addition, not all ICO projects can meet the requirements for securities, which makes it possible for criminals to maneuver.

7. Conclusion

The growth of the digital asset ecosystem has led to the emergence of hundreds of crypto exchanges that facilitate trading of digital assets. This phenomenon was noticed by the attackers. Market manipulation schemes that were successfully tested on the stock market have been transferred to the cryptocurrency market. Today we can talk about an independent type of cryptocurrency exchange crimes, and the "pump and dump" scheme is one of the most common. Having become infamous due to the actions of brokers at the turn of the 90's and 20's, the scheme is now used to manipulate the value of digital assets. Despite the general similarity, the scheme implemented on the cryptocurrency market has a number of exceptional features that make this scheme more dangerous than on the traditional stock market. The technological component of cryptocurrencies, almost unlimited opportunities for communication, the immaturity of the industry and the lack of unified approaches to legal regulation create a favorable environment for the widespread use of the scheme, which directly affects the liquidity of assets. Financial regulators around the world are just beginning to create regulatory mechanisms for ICO, and US and UK regulators are warning investors about the risks on these markets. China, meanwhile, has banned both ICO and yuan trading on cryptocurrency exchanges. One of the most effective methods of counteraction is to strengthen control over compliance with the prohibitions on manipulation directly by the exchanges, since in the current conditions, receiving commissions from all transactions, they are practically not interested in this. We believe that the global trend that has emerged over the past two years to regulate the activities of crypto exchanges will not ignore the issues of manipulating the crypto market, although it seems quite difficult to establish effective preventive mechanisms.

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