How does the stock market manipulation affect the emerging market in developing countries?

Yaoyuan Zhang

College of Social Sciences and Humanities, Northeastern University, Boston, United States

Corresponding author: zhang.yaoyuan@northeastern.edu

Abstract. Due to the expansion of stock markets in developing countries and the large number of buyers and sellers seeking to benefit from their dealings, manipulation has become more sophisticated. Forgers may influence the stock market by creating a false impression, misleading investors, and convincing them to buy their stocks. Because it could make investors anxious about the market, market manipulation serves as a barrier to market depth. People must be aware of these challenges, take additional measures, and abide by certain norms and special legislation in order to deal with this issue without impairing investors' judgment and exposing them to deceptive pricing.

Keywords: Stock Market, Market Manipulation, Market Efficiency.

1. Introduction

Market manipulation is the intentional manipulation of a security's price with the intention of deceiving investors and profiting from it. This paper decided to research stock market manipulation because people usually believe that the market was open to investment and that everyone had a chance to profit from it. Small retail investors believed that if they were sufficiently informed and knowledgeable about a certain company trading on the stock market, they could forecast its trajectory and profit. In fact, it could succeed if the market moves in accordance with the order and its prognosis is accurate. However, the market is not really free and fair. Private institutes and professional investors have far more advantages than retail investors because they have access to more capital that they can use to influence the market and attract retail investors like us to invest in, and then “harvest” money from retail investors. There was a term in China called “cut leeks”. It refers to using capital and strategies, large and professional private institutes and investors benefit from the hand of retail investors. Leeks are referring to retail investors that have less money and knowledge, they just follow the trend and good news, and have less consideration about the risk of the market. So, it is easy for large capital to control the market and “cut” those “leeks”.

There are many ways of manipulation, the most common one is what is mentioned in the previous paragraph called “cut leeks” manipulators always like to target stocks that are unpopular, and usually have low prices and low trading volumes. When the moment is ripe, they'll boost their purchasing, which will cause a significant price rise to pique curiosity and draw in new purchasers, raising the stock price. This action will then attract the attention of social media and the excitement of the public will further propagate and attract more buyers, this process can also be manipulated. As the price of the stock keeps increasing, and retail investors are indulging in the joy of making money, manipulators will sell their large portion, when they leave the market, the price will suddenly start to drop, and the retail investors will start to panic and hope the price can rise again, however, this will not happen, this stock will stick on their hand, and they will lose lots of money. Some other common ways to manipulate the market include fake news, insider information, and cornering the market.
Although there are regulations and authorities to inspect the market to prevent any manipulation, many cases still happen because manipulation is hard to catch.

The specific question this research is interested in is how stock market manipulation affects the market quality of developing countries. Since there is a lack of market regulation and supervision in developing countries, there might have more manipulation in the stock market, the research is going to conclude how those manipulations change the market order and how they affect investors and market quality in developing countries.

2. Theory of manipulation

According to Putniņš [1], market manipulation entails acts or trades with the goal of encouraging others to trade or fooling others by driving a price to an artificial level and gaining profit from certain actions. The definition clues to the nature of this problem, which is driven by the personal benefit from manipulation [1]. In the short world, market manipulation is any action that interferes with the market and prevents the execution of a fair price or any movement that artificially influences the stock price in the stock market. The manipulation of the market for a specific security by investors is characterized by the United States Securities Exchange Commission as deliberate and preplanned action [2]. Manipulation is an important problem in both developed and developing markets, the difference is in developing markets, there are few regulations to prevent and punish manipulation compared to the developed markets, so manipulation will happen more and have more influence in emerging markets. When talking about manipulation in the stock market, it is always the manipulation of price. In a normal stock market, prices should reflect the worth of the stock as determined by accounting data and all publicly available corporate information, without any judgment on behalf of investors. Investors will lose trust in the market if they begin to believe that the stock price does not fairly represent the worth of the company, since price is the most crucial market indication. A lack of public trust in the fairness and integrity of the market, justice in capital asset pricing, reduced stock liquidity, less investment, inefficient resource allocation, and finally a drop in economic growth are effects of manipulation that may cause losses for investors. This issue is especially crucial for developing countries since their market is emerging and need a consistent and increasing volume of investors to seek market growth, it is vital to keep the market confidence.

The issue of market manipulation appears almost since the establishment of the first securities market, the human influence on stock market price has always been an important issue. In the 17th-century stock, traders discovered that they may benefit by manipulating prices in a number of different ways. They sold their shares as a result, using the stock they had on hand to make a concentrated time of use for it. Fearful investors started to sell their shares as well. After enough of a decline in stock prices, traders might purchase again. Shares that were sold are redeemed for less money. This tactic was known as a "bear raid." Brokers discovered that adopting this method in conjunction with spreading erroneous information and false rumors about the company's future may also provide greater profits as a consequence of this strategy's effectiveness. According to Allen and Gale [3], Action, information, and trade-based manipulation are the three basic categories.

Action-based is the type of manipulation that influences price by affecting the real value of trading assets, for example, a manager shut down one of the factories of the company which causes the stock price to go down. In this case, the manager is the manipulator, and his act of shutting down the factory is the "action" in action-based manipulation. However, this type of manipulation rarely occurs because the action is too easy to be inspected by the regulators. It is also not easy for manipulators to execute the action to influence the stock price and gain benefit.

Information-based manipulation entails the manipulation of stock values through the dissemination of false rumors and misinformation. Securities investors are susceptible to market risk. Prices and trading volumes reflect how investors perceive information and rumors. Forgers would therefore have a motivation to disseminate false information and sway public opinion in favor of their nefarious goals. Due to Van Bommel’s [4] model rumors are instructive in an equilibrium state, As a
result, logical, money-making actors trade on them. Because the rumors are unreliable, prices might increase too quickly. This enables the knowledgeable rumor spreader to earn from both trading against overshoot prices and trading on their information. Eren and Ozsoylev [5] discovered that hype and dump manipulation increase trade volume and market depth but decreases market efficiency using a comparable model. However, this increase in trade volume and market depth is only in short term, once the manipulators gain their benefit, they will sell their stock and the price of that stock will suddenly drop, which will cause investors to lose their confidence in the market, thus affect the market efficiency and quality.

For trade-based manipulation, manipulators engage in transactions with one another (by buying and selling securities), which gives the impression that the market is busy and encourages other investors to purchase shares by inflating prices and trading volume. The number of transactions—liquidity being the one that can be deemed to be most crucial—is one of the elements that have an impact on investors' choices. It is obvious that increased liquidity power can boost a share's appeal to investors. By offering a fake presentation, misleading investors, and inciting them to buy and sell their shares at higher prices, forgers can manipulate stock market trading activity in these circumstances.

3. Impact of stock market manipulation

3.1 Background

Emerging market stock markets have seen tremendous expansion during the last ten years. Due to shortcomings in the information environment and comparatively little regulatory protection, stock market manipulation may be seen as a very serious issue in developing stock markets. If the market was manipulated, we cannot anticipate prices to accurately represent how supply and demand are being impacted by the state of the economy in a market or sector that has been skewed. In fact, stock market manipulation puts all gains and the flow of resources at risk. If there is a drop in public confidence in the market's fairness and integrity, unfair capital asset pricing, a decline in stock liquidity, a decline in investment, or inefficient resource usage, investors may lose money as a consequence of manipulation, and eventually a decline in economic development. The following review will introduce their impact on the stock market in developing markets separately through examples.

First, it is important to know the characteristic of manipulated stock in emerging markets. In Shah et al [9].’s study, he uses hand-collected 244 manipulated examples from 2001 to 2017 to look into the distinctive features of manipulated enterprises in East Asian developing and developed markets. He also used panel logistic regression in the empirical study to determine which stocks are most likely to be manipulated. The findings demonstrate that in developing markets, large and highly liquid enterprises are more prone to be influenced. Furthermore, the marginal effect indicates that businesses with a large free float and market capitalization were more likely to be influenced by these marketplaces. Profitable businesses, on the other hand, were less likely to be influenced in developed and emerging markets. In emerging markets, only a few studies have been undertaken to experimentally identify the features of manipulated stocks. These findings can be used by the regulator to identify likely and predicted manipulation and to create appropriate enforcement regulations. In addition, while creating a portfolio, investors might consider these features of manipulated stocks in order to decrease portfolio risk.

3.2 Impact on market quality

The issue of stock manipulation is crucial to the effectiveness of the market. There is little proof of stock price manipulation and its effects on market quality, despite the fact that it is an increasing problem in many emerging stock markets. The features of manipulated stocks and their effects on market quality are examined in Huang et al [10].’s research utilizing a manually compiled database of manipulation instances that the SEC looked into in Taiwan, an emerging market, between 1991
and 2005. They discover that during the manipulation period, abnormal return, abnormal turnover, and abnormal volatility are higher for manipulated shares than for the matched sample by comparing them to industry- and size-matched portfolios. The vast majority of stock price manipulation allegations involve efforts to increase rather than decrease stock prices, supporting the assumption that it is difficult to drive down prices because of prohibitions on short-selling. The guilty sub-average sample's cumulative abnormal return exceeds 70%. 91.67% of all instances in our sample are trade-based manipulations. Typically, manipulated stocks are quite tiny. Additionally, throughout the manipulation period, returns, trade volumes, and volatility all increase. In the post-manipulation era, the manipulated stocks' anomalous turnover and volatility are still greater. At the start of the market opening, the manipulators frequently push stock prices to their ceiling, holding steady until the market closure. However, the equities in the guiltless sub-sample did not have unusually high gains throughout the manipulation period. Collectively, the aforementioned data demonstrate that stock price manipulation may really cause market inefficiency by distorting stock prices away from their true value. Furthermore, the manipulation activities have worsened the market depth and subsequently the market quality by causing unusually high trade volume and volatility. Additionally, the study looks at the various effects of pump-and-dump and stabilization manipulation on the market. They found that stabilization manipulation is a type of market manipulation that frequently involves corporate insiders, and that pump-and-dump manipulation is a trade-based manipulation in which, due to arbitrage's limitations and investor behavioral biases, manipulators might profit from a pump-and-dump trading technique by amassing a speculative asset while driving its price up and then selling it at a higher price. Pump-and-dump manipulation and stabilization manipulation have distinct consequences on the market. Contrary to pump-and-dump manipulation, which has a detrimental influence on price accuracy and market performance, stabilization manipulation does not seem to have any negative market effects.

3.3 Impact on volatility, liquidity, and returns

To analyze market manipulation and its effects on stock market quality, Ergün et al [6], used a dataset which includes all trade based manipulation occurrences in Turkey between 2005 and 2013 that were acknowledged by the Capital Market Board (CMB). The number of days between the start and finish of the manipulation period is referred to as its length. The average manipulation time for the 170 instances was 39 days, ranging from 330 days for the longest manipulation to one day for the shortest. As a reference point, the study also uses data from 99 unmodified stocks. These unmanipulated stocks were picked at random from the national market of Borsa Istanbul, and they were examined throughout the same time period as the manipulated stock. The data are cross-sectional and express volatility as the daily stock return standard deviation. The return is calculated using the closing price's logarithmic difference, and the liquidity is determined by the average daily turnover. They look at how traders choose which stocks to influence in a young market. The research result is valuable in examining the effect of manipulation on emerging markets and raising awareness of this issue and how to regulate it. The main finding of this study is that manipulators are more likely to pick underperforming, illiquid, and less volatile stocks. Additionally, it demonstrates how stock liquidity, return, and volatility increase before and decrease after the manipulation, lowering market quality. They note that at the time before the manipulation, the average daily returns for the manipulated equities were the same as those of the non-manipulated ones. However, throughout the course of the manipulation, the manipulated equities' average daily returns were 1.22% greater than those of the unmanipulated stocks, and this difference is statistically significant. Average daily returns for the manipulated equities are statistically significantly lower than for the benchmarks during the post-manipulation period, at 0.09%. The preference of stock price manipulators for underperforming stocks is therefore obvious. They observe that manipulation drives up the price, which afterward fell below the level before the manipulation. For volatility, they conclude that equities that are volatile are more prone to be manipulated, and throughout the manipulation process, manipulated stocks frequently see significant price changes. These findings collectively imply that low volatility equities
are chosen by the manipulators, and that volatility is thereafter present in the manipulated stocks following the manipulation period. In other words, volatility for manipulated equities continues to be higher after the manipulation. They observed that volatility, liquidity, and returns are all high throughout the manipulation period. This result is really helpful because one of the ways that stock markets may affect economic growth is through liquidity. By lowering associated risk and increasing profitability, liquid stock markets encourage long-term and potentially more profitable investments: If investors wish to access their money or change and diversify their portfolios, they may simply and inexpensively sell assets, and businesses will always have access to the initial investors' funds. Consequently, savers feel more at ease making long-term investments, which gradually grow to be seen as more alluring and low-risk. Therefore, more liquid stock markets make it easier to invest in long-term, possibly rewarding initiatives, improving the chances for long-term growth. Additionally, liquidity improves investor motivation to learn more about companies and enhances corporate governance, which encourages development. If the liquidity was decreased, market quality and performance will keep decreasing, investors will lose confidence in this market. In the long term, this developing market will stop developing, as a result, it may increase the unemployment rate and decrease economic factors, more seriously it may lead to a financial crisis.

3.4 Impact on economy

Another research done by Akinmade et al [7]. Explores the economic impact on Nigerian Stock Exchange because of stock market manipulation. The enormous data set utilized for the empirical research contains all 186 real manipulation cases that the Nigerian Security and Exchange Commission prosecuted between 2002 and 2016. To assess the economic impacts of various manipulation techniques and comprehend how they alter market measurements, they use market microstructure research, the event study method, and the Error Correction Model. In this study, Metrics of market efficiency (such market capitalization, the value traded ratio, and the All-Share Index) have been shown to be manipulated. As a result, actual traders are compelled to leave the market in order to avoid interacting with manipulators. Such significant divestments and the ensuing financial risk, which has severe impacts in the post-manipulation era, impair the Stock Exchange market's ability to improve economic performance. In essence, manipulative trading has a negative effect on economic variables (such as the GDP). Although the Nigerian capital market may be viewed as being in its infancy, it has recently been among the rising financial markets with the quickest growth rates. According to Aliyu [8], Investigations show that despite the market showing a lot of promise, several dishonest and detrimental actions contributed to its collapse in 2008. Sadly, the Nigerian Stock Exchange fared poorly in the honesty department, which had a negative impact on the market. This led to significant foreign investment leaving the nation, ongoing job losses, and a significant decrease in tax revenues. According to Aliyu's analysis, some investors were concerned about stock market overvaluations, insider trading, brokers selling clients fake shares of stock, and stockbrokers diverting investor profits well before the global financial crisis. According to this study, the bid-ask spread, a gauge of efficiency and information asymmetry, widens in reaction to manipulation. Liquidity significantly increases during manipulation and then sharply declines after it, and volatility also sharply increases. This information demonstrates that the Nigerian stock market had a large number of inefficiencies as a result of manipulation.

Lastly, a work by Khwaja and Mian [12] investigates the results of Pakistan’s market intermediaries' stock market manipulation. They find that brokers generate annual rates of return that are 50–90 percentage points higher than those attained by outside investors when they trade for their own accounts. The Pakistani stock market's unique deal-level statistics provide the foundation for this. This disparity in profitability cannot be explained by broker liquidity provision or market timing. Instead, they uncover strong proof in favor of a particular "pump and dump" price-rigging technique based on trade: when prices are low, brokers who are working together a trade to artificially boost prices and entice traders who provide favorable feedback. The former leaves as prices increase, leaving the latter to bear the price decline that follows. According to conservative estimates, these
manipulation rents may make up close to half of all broker revenues. These high rents might be the cause of the difficulty in implementing market changes as well as the frequent limited size and lack of outside investment in developing stock markets. They held the view that the substantial wealth transfer from outside investors to insider manipulators would likely have a considerable adverse impact on the volume and quantity of outside investors who chose to engage in the market, in terms of direct costs. Rational and competent players wanting to participate in or raise funds on the stock markets face significant entry barriers due to the existence of manipulators and unskilled traders. An important aspect of economic underdevelopment is these participation costs.

4. Conclusions

Any intervention that stops the free flow of market supply and demand is considered a type of manipulation. Regarding the fact that market manipulation contributes to a lack of investor trust in the stock market, it will limit the capital market's growth and expansion as an economic engine. Insufficient investor knowledge and information asymmetry in the market, based on research in the domain of stock market rigging, are the primary drivers of manipulation. Along with other negative effects, manipulating stock prices also prevents the market from expanding, discourages investors from investing, undermines investor trust, raises trading frequency, and exhausts shareholders. These issues are critical for emerging markets, since the market is still developing with less regulation, it is relatively easy for manipulators to invade and gain illegal profit, most importantly, they will hinder market development. An increase in investment and public confidence is crucial for emerging markets, the market can keep developing only with more capital and investors. Manipulation will hugely discourage people to invest and trust to the government. It is important for emerging markets to set up more complete regulations to avoid manipulation in the stock market.

References