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How to Protect Financial Consumers in Virtual Asset Markets? Issues in Korea

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ABSTRACT

This paper is concerned with appropriate regulatory remedies to manage and control the overheated speculation and significant fraudulent activities in virtual asset markets in Korea. The cryptocurrency market has grown like skyrockets in size as measured by market capitalization and trading volume, particularly during this COVID-19 pandemic period. As the market has been growing too fast, regulatory responses haven't been prepared and applied to the market in a timely matter, and a lot of speculative and fraudulent activities have risen under the regulatory shadow. In order to make the market develop soundly with integrity, appropriate regulatory measures should be introduced including externality checks and controls, securities and financial conduct regulations, strict investor identification, financial education, and financial consumer protection like in other banking and securities services.

Keywords: Virtual Asset Markets, Cryptocurrencies, Financial Consumer Protection, Korea

I. Introduction

This paper is a rewriting of my keynote speech for the annual conference of the International Academy of Financial Consumers (IAFICO) in August 2021. The objective of this paper is to investigate the problems in virtual asset markets and to suggest some policy responses. It mainly discusses regulatory and legal issues for financial consumer protection in the virtual asset market in Korea.

It is the virtual asset market that has most expanded during the COVID-19 pandemic in Korea, and in the world as well. As the market has been quickly growing, regulatory responses haven't been prepared and applied to the market in a timely matter. Therefore, serious financial consumer protection issues have occurred.

If the market is allowed to keep going like this without

appropriate regulatory interventions, the market may become a weak spot that could generate and spread risks into financial markets overall. The first policy intervention that must be urgently arranged should be measures to check any possibility of a coin run and its externalities. Additional measures are also urgently needed to stop the high-pitched speculations and fraudulent activities in the market. The available policy measures for the second purpose are, for example, securities and financial conduct regulations. A third policy that is needed is to introduce strict investor identification rules such as a Know-Your-Customer (KYC) rule in cryptocurrency transactions. Anonymity in cryptocurrency transactions seems to create bigger social costs than benefits. The fourth measure is financial education as a mandatory duty of virtual asset exchanges for their investors. The last one is an application of the Financial Consumer Protection Act of 2021 into the virtual asset market.

The remainder of this paper is organized as follows: Section II describes the characteristics of the virtual asset

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market, especially during recent COVID-19 pandemic in Korea. Section III discusses fraudulent schemes and financial consumer losses. Section IV discusses regulatory loopholes and suggests some policy responses. Section V provides concluding remarks.

II. Virtual Asset Markets during the COVID-19 Pandemic in Korea

Virtual asset markets are dominated by excessive investment and fraudulent schemes, but there is no robust legal basis for regulation yet in Korea or in some other countries with similar situations. In Korea, recently the number of investors has been growing fast. For example, it was around a little more than 10,000 in October 2020, but it increased ten times a month later to more than 100,000 in November 2020, more than 1 million in March 2021, around 2 million in April 2021, and by May 2021 it was more than 6 million (Chosun-ilbo, 2021). Prices of cryptocurrencies in Korea were around 18~20% higher than international prices of the same cryptocurrencies. For example, the price of Bitcoin was 18.1% higher in Korea, Ethereum 18.0% higher, Ripple 18.5% higher, and BitcoinCash 20.1% higher than the internationally transacted prices on April 6, 2021 (Donga-ilbo, 2021). This is the so-called *Kimchi* premium revealing that virtual asset investments in Korea were more overheated than the investments in other countries. According to Pieters and Vivanco (2017), the premium depends on regulatory differences in investor identification requirements. Unless identification is required, the premium will be larger.

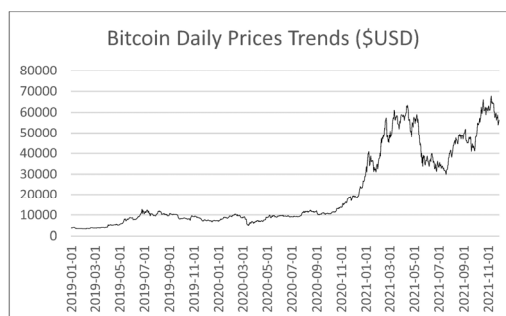
Most of the investors were 2030 young adults who are around 70% of the whole new investors entered during the first quarter of 2021 (JoongAng-ilbo, 2021; New1, 2021). This means that the young generation who should-be-most-promising-and-be-sound at the start line of their lives is vulnerable to fraud and might be obsessed with wishful thinking which could be a condition of a sort of irrational exuberance (Shiller, 2015).

Figure 1 shows the trend of bitcoin prices. Figure 2 shows the trend of daily new cases of COVID-19 since the beginning of the pandemic early last year. The two graphs are quite co-moving, and the COVID-19 case trend leads the bitcoin price trend. On October 2020, Bitcoin

prices were at the same level as the average of 12 months, but the number of COVID-19 cases was continuously increasing and right before a steep peak. Of course, the COVID-19 virus does not create any intrinsic value of bitcoin but they are highly correlated. Why?

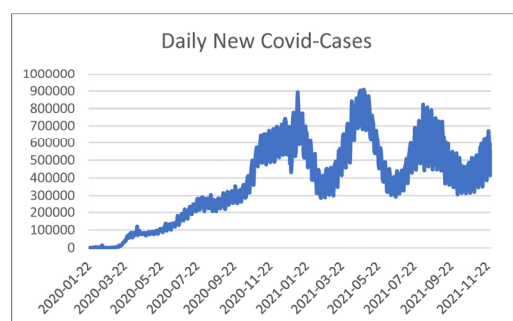
There may be two possibilities. First, the genuine value of bitcoin has increased during the pandemic period. Second, there may be a belief or gamble that genuine value of bitcoin will increase. Presuming the second is true, we need to discuss this market anomaly and its implications for financial consumer protection.

In Korea, virtual asset daily trading volume is 32.6 billion U.S. dollars (USD) as of April 2021 and that is bigger than the daily trading volume in stock markets of 25 billion USD, as of the same period. The number of investors for virtual assets is 6.12 million, while number of stock investors is around 10 million as of May 2021. Considering the short history of the virtual asset market that began around 2009 and stock market that have been



Source: <https://coinmarketcap.com/currencies/bitcoin/>

Figure 1. Trends of Bitcoin Price (\$)



Source: <https://www.worldometers.info/coronavirus/>

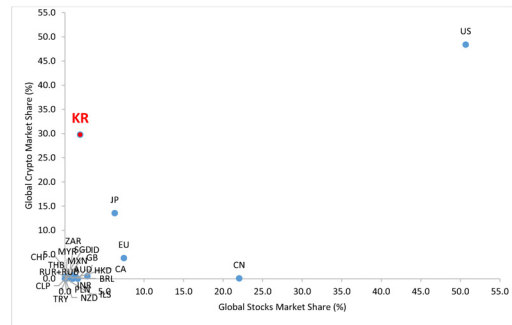
Figure 2. Trends of Daily New Cases

operating since 1956, it is surprising that the number of virtual asset investors is more than 60% of stock market investors. The virtual asset market investor, 6.12 million, itself is a big number. The Korean total population is a little more than 50 million. So, more than 10% of the total population participates in the market as investors.

The virtual asset market of Korea is one of biggest in the world (Pieters, 2018; Pieters and Vivanco, 2017). First, virtual asset market capitalization of Korea is second in the global virtual asset market. The U.S. virtual asset market capitalization is 50% of global market capitalization, and the virtual asset market capitalization of Korea is around 30% of global market capitalization (Figure 3), while Korean stock market capitalization is less than 2% of global stock market capitalization (indexmundi.com, 2021). Second, virtual asset daily trading volume over stock market daily trading volume of Korea is exceptionally high, even higher than the same ratio of the U.S and the difference is big. The ratio is only 5% in the U.S. However, it is 80% in 2018 and 130% in April this year in Korea (Figure 4). This is an obvious excessiveness in the virtual asset market especially by 2030 young investors who mostly borrow a large amount of debt for the investment.

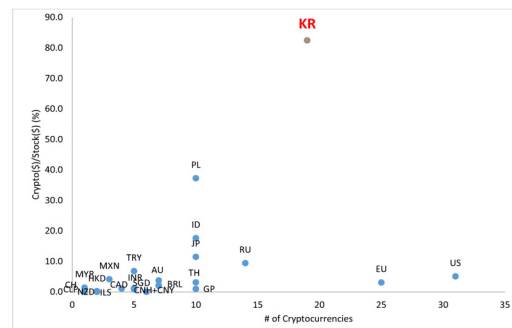
During the first quarter of 2021, household debt increased 9.5% comparing to the same quarter last year which is historically high, of which mortgage loan increased 8.5% and credit loan increased 10.8% (Bank of Korea, 2021a). Since most 2030 young adults are not homeowners, they could only borrow by way of credit loan which is one of the main reasons why credit loan increased more than mortgage loan. Debt increase of 2030 young adults from the end of 2019 to the end of 2020 was 17.3% (Bank of Korea, 2021a, Hankyang, 2021).

The debt of 2030 young adults is 25.5% of total household debt as of the end of 2020, which may be the highest one if it is normalized by income or wealth sizes for each age groups of 2030, 4050, and 60+. The over-indebtedness of 2030 is called *Young-Kkul-Bit-Tu*, a Korean term meaning 2030's excessive investment with big debt collateralizing even their souls. Of course, no souls can be collateralized but it is just a symbol of their excessive eagerness.



Source: This graph is constructed using data in Pieters (2018) and Park (2021).

Figure 3. Global Market Shares



Source: This graph is constructed using data in Pieters (2018) and Park (2021).

Figure 4. Relative Daily Trading Volume

III. Fraudulent Schemes in Virtual Asset Markets

Virtual asset markets are widely being dominated by fraudulent purposes including Ponzi schemes, price manipulation, speculation (gambling), tax evasion, etc. In the virtual asset market in Korea, typical Ponzi schemes often appear (Korean National Police Agency, 2011; Women News, 2021; News Tomato 2021). For example, in a Ponzi scheme, an exchange attracted investors to deposit 6,000 dollars, promising high returns as much as 3 times of the deposit in several months, and the exchange successfully collected funds of 1.7 billion dollars from 40,000 number of investors. If an investor brought a new investor in the exchange, the exchange paid the investor the commission of 1,200 dollars per new investor. Once investors

began to show their trust to the exchange, the exchange circulated their own cryptocurrency tempting that their currency will be pricey in the market. The scheme targeted mainly retirees and housekeepers who are relatively financially illiterate. Another exchange collected 4 billion dollars from 70,000 investors using a similar Ponzi scheme. Many virtual asset exchanges in Korea are being suspected of manipulating Ponzi schemes.

An unique price manipulation technique was uncovered. It is called *Gaduri*, a Korean term meaning instruments such as a closed box or a net that captures birds on the ground or traps fish in the sea. *Gaduri* pumping closes doors for new entry and exit of coins out of an exchange without notifying their investors, and the exchange self-trades the given amount of the coin using its own multi-accounts. Then the coin price begins to increase, and the exchange opens its doors for new entries of investors. Investors do not know the truth of the situation and just believe that the genuine value of the coin might increase. *Gaduri* pumping was typically utilized immediately after the exchange was hacked. Price manipulation is a crime in Korea, and the number of such manipulating crimes has been increasing more than 7 times, from 41 in 2017 to 333 in 2020.

Globally it is also known that the motivations for investments in virtual asset markets are speculation, tax evasion, money laundering etc. In the UK, for example, speculation is serious. 47% of investors bought cryptocurrency as a gamble (HM Treasury, 2021). In the U.S., 36% of cryptocurrency transactions are motivated by tax evasion (Williams, 2018).

IV. Regulatory Loopholes in Virtual Asset Markets and Policy Suggestions

Why do the fraudulent activities happen so widely? Because there are regulatory loopholes and virtual asset markets just enjoy it. First, virtual asset exchanges have not been required to identify investors. Second, anti-money laundering policy for virtual asset markets recommended by FATF (2019) may still have drawbacks. Customer Due Diligence (CDD) and Enhanced Due Diligence (EDD) need full investor identification for their regulatory implementation but virtual asset transactions are not that

identifiable. FATF requires all transactions over 1,000 dollars to be reported but the marginal cost of cutting into smaller pieces less than 1,000 dollars is negligible, using digital techniques. This means that FATF regulation can be evaded and so may not effectively work.

Third, securities and financial conduct regulations are not applied to virtual assets in Korea. Due to this, any initial coin offering (ICO) was not banned in reality even though it was banned legally since 2017 in Korea. Many ICOs were surveyed as active in 2019 (Financial Services Commission, 2019). It works like shadow banking under cross-border regulatory gaps and arbitrage and is kind of underground economy. Fourth, the Financial Consumer Protection Act only applies to traditional services such as banking, securities, and insurance services but not to virtual asset transactions. So, virtual asset issuers and exchanges do not have to comply with fiduciary duty for financial consumers.

Last April, Korean government launched a half-year *Special Oversight Program* based on the revised Anti-money Laundering Act in effect since last March (Office of Government Policy Coordination, 2021). The program requires all exchanges to register by September 24, 2021. Unless registered, the exchange will be forced to be closed immediately. Criminal Penalties will be charged against intentional defaults by an exchange, misappropriation of investor funds, or data manipulation. Under the program, recently more than 10 exchanges have been found using fake accounts to avoid anti-money laundering regulation. Currently the total number of exchanges in Korea is 79.

We need to further take policy measures for virtual asset market integrity and consumer protection.

First of all, the possibility of a coin run and its externality to financial market should be checked. Bank soundness and 2030 young adults can be negatively impacted by coin runs. Of course, virtual asset market capitalization of about 50 billion dollars is relatively small as it is 1.9% of Korean stock market capitalization. However, default can happen even with the last 1% of debt. That is, marginality could create a bad situation. The household debt ratio is relatively quite high in Korea. In particular, the debt ratio of 2030 young adults is 25.5%, and the debt ratio of over-60s is 18.1%, accounting for 43.6% of total household debt last year. Bank of Korea announced that household debt increased 10.3% last second quarter this year comparing to last year same quarter, while individual disposable income increased 3.9% during the same period.

The ratio of household debt to disposal income is 172.4% which is the highest since the statistic has been reported (Bank of Korea, 2021b). In the situation that an economic downturn begins, a coin run trigger a household debt crisis. Therefore, regulators should warn of and manage risk contagion that can be caused by a coin run.

Second, securities regulation should be strongly introduced to the virtual asset market as in other countries such as the UK and the US (SEC, 2017; Kim, 2018; Kim, 2019). Most virtual assets are securities. Generally, securities law presumes the weak or semi-strong form of market efficiency hypothesis but the stock market is not fundamentally efficient. Therefore, mandatory disclosure is required, fraud-on-the-market theory applies, civil money penalty is charged and class action is approved. The same regulatory principles should apply to the virtual asset market as long as the assets are classified into securities. In particular, the civil money penalty could work as an incentive mechanism against fraudulent activities and remedy sources for consumer loss by those frauds.

Third, financial conduct regulation should apply to virtual assets especially those that are not classified into securities (EU, 2020). Virtual assets are of three types: securities, utility, payment. Most of them are the securities type that will be under securities regulation. However, the payment type and utility type should also be regulated by financial conduct regulation that focuses on the business conducts of exchanges in order to protect investors from fraudulent behaviors.

Fourth, a strict investor identification rule such as Know-Your-Customer (KYC) rule should be adopted in cryptocurrency transactions (Pieters and Vivanco, 2017; Pieters, 2018). Anonymity in cryptocurrency transactions seems to create both social costs and benefits, like two sides of a coin. On the one side, it creates high accessibility that reduces transaction costs, but on the other side, it creates big abusive utilizations of cryptocurrencies for frauds, tax evasion, and speculative investments. Cryptocurrencies like Bitcoin are not yet assimilated into a consistent global regulatory framework. Exchanges which do not identify their customers to establish accounts exhibit statistically different price patterns from exchanges that do. And there is evidence that users with criminal intentions use Bitcoin. For these users, the anonymity is its primary benefit. In order to prevent criminal intentions and fraudulent behaviors, a cryptocurrency wallet should identify its holders (Pieters and Vivanco, 2017).

Fifth, financial education should be imposed on exchanges as a mandatory duty. Financial education is a kind of investor-friendly mandatory disclosure of related information. Investors have rights to know information symmetrically about reality such as bitcoin and block-chain paradoxes, and the possibility of coin run and fraudulent schemes. Bitcoin paradox reveals a reality that volatility of bitcoin price disproves of its possibility as money, a standard medium of exchange and the volatility is inevitable unless centralized. Bitcoin argues from the beginning that it could be efficient money with non-centrality and will replace the central bank money that is controlled by centralized power. Block-chain paradox tells that if block-chain is more public and open, it is less efficient. It should be clarified that any story false or not that does not comply with fiduciary duty should not raise funds from investors. Financial education is a part of fiduciary duty and should be a pre-condition of virtual asset transactions.

Lastly, the Financial Consumer Protection Act of 2021 (FCPA 2021) should apply not only to traditional financial markets but also to the virtual asset market. There is no reason that the virtual asset market should be an exception of FCPA 2021. A virtual asset is also a financial product and any exception of FCPA 2021 will endanger the sound growth of virtual asset markets. Excessive speculation and fraudulent activities will be encouraged and expanded if FCPA 2021 does not apply to the virtual asset market.

V. Concluding Remarks

The first cryptocurrency is Bitcoin which was first mined in 2009. Since then, the number of cryptocurrencies skyrocketed to 12,180 as of September 28, 2021, and the market capitalization is 1.86 trillion dollars according to CoinMarketCap.com. When Bitcoin first appeared in the world, it aspired to become a decentralized money and would crowd out legal tender. However, as Bitcoin paradox proves, it failed to become even simple money as a medium of exchange, but it is abusively utilized for speculation and fraudulent activities. In the cryptocurrency market both issuers and investors are speculative. It is as if speculation meets speculation, and it becomes stronger

speculation. How to cut the speculation cycles is the most important policy challenge of regulators. The relative size of cryptocurrency seems smaller than that of the traditional securities market, but its absolute size is not trivially small and daily trading volume is bigger than in the traditional securities market. Seemingly paradoxically, even though it first proudly announced that it will be free money excluding central bank money, it now inevitably will have to embrace government intervention in order to control its rocky speculation and fraudulent activities to become stable assets. Nobody appreciates its current speculative volatility and involvement in fraudulent activities. Without integrity in the market, no virtual assets can be trustworthy and sustainable in the long run.

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