Examining Individuals Irrational Behavior in Economic Bubbles

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Abstract

Although it has long been agreed that traditional economic theory assumes rational behavior, at one time there was considerable disagreement over the meaning of the word "rational". To many, the word suggested an outdated psychology, lightening-fast calculation, hedonistic motivation, and other presumably unrealistic behavior. No matter who we are and what social class, understanding how we are predictably irrational can provide a starting point for improving our decision making economically. In this study, we as human nature would behave predictably irrational in the situations due to the influences of outside environments and inside of our human emotions such as three economic bubbles that this paper studies are the Dot-Com bubbles, Japanese housing bubbles, and United State housing bubbles. This study shows that individuals should improve their own independent thinking in making their decisions through understanding the idea for making our own decisions that they are neither random nor senseless.

Keywords:*irrational behavior, economic bubble, human choice, behavior economics*

1. INTRODUCTION

Am I making the right decision? This is the question that people ask themselves daily while they are making any kinds of decisions such as stopping one day of drinking coffee when sick, going to the date night when there is still work left to do, or running a marathon during Coronavirus. In other words, this question can be generalized into the term called rational behavior, and this holds the assumption from economists that, in human nature, we are capable of making the right decision for ourselves. But are we really? In my observations, we are behaving in an irrational way, especially through the lens of the economic bubble (prices of assets grow much higher than they should be growing). Furthermore, my observation for irrational behavior should be described as predictably irrational, which means that our irrationality happens the similar way, again and again in those bubbles. No matter who we are and what social class, understanding how we are predictably irrational can provide a starting point for improving our decision making economically.

Speaking of economics, the image of a dollar sign flows into people's mind immediately. It is true that economics is related to the dollar bill but not necessarily. This implies that there is another mechanism to get the measurements of how economic one decision is, so the intrinsic value is, in this case, the yard stick. Intrinsic value is not fixed, and it is changed throughout individuals. An example would be a person who tastes the shining looking wine and feels good might have a higher intrinsic value for this wine than another person who feels the same wine to be ordinary. In terms of economic decision, the first person makes the better choice than the second person because the first person gets more satisfaction from it. But, the second person will not notice that he/she made a worse choice from picking the good looking wine just because it tasted bad, which there is no direct "loss" from drinking a bad tasted wine. Thus, it is not difficult to see that if individuals directly lose money in a situation when they intrinsically value one thing higher, then they will instantly know that they made a worse choice. The idea of regret is also presented that individuals thought that they made a "rational" choice but eventually lead to a disaster. However, it is still very common to see the disasters of individuals making "rational" decisions, especially in the time of economic bubbles. One example was the Dutch tulip mania in 1500 that a single bulb of tulip cost about at least $50,000 USD with today's currency, but the end was the

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burst of this tulip bubble leaving families with financial disasters. Were they fools? This question leads to my argument that individuals aren't as rational as Economists normally think, which they tend to think that individuals can act rationally in terms of consistently making the correct decision throughout any situations (in other words, they tend to think that human nature can either always make the right choice or to quickly adjust from our own mistakes); however, through my observations, we as human nature would behave predictably irrational in the situations due to the influences of outside environments and inside of our human emotions.

2.ECONOMIC BUBBLES

In the summer of 1993, the US government began to redirect "approximately 30 billion" dollars of the Cold War dividends toward an "Information Superhighway" [3]. Following the hot topic of this "Information Superhighway", multiple large magazines companies started the headline suggesting that the digital revolution would create a zillion dollars in the industry. Thus, this novel idea of a booming digital age paved a path for the latter economic bubbles in which people failed into. For example, the momentum began at the word DotCom. Yes! It totally means .com, but this was an unfamiliar symbol for the people in the late 20th century. The essential is that if there was a company's name that was related to this word, then the stock price of this company would be at least doubled no matter how profitable the company was. For instance, a company called theglobe.com went public(in the stock market), and its value soared over 700 percent in a single day, and the company itself barely had revenues! However, of course, the stock market wasn't going as smooth as those crazy investors would think. After the year of 2002, 100 million individual investors had lost $5 trillion in the stock market [3]. This raises the question for why people were still buying in the stocks that were at the time worthless. The answer was coming from a quote of one individual investor, "when bought today, are worth more tomorrow" [3]. This sentence sounded irrationally right, because there is no such thing as becoming a millionaire without effort in one day. However, if we take a step back and plot into the outside environment in this sentence, then you might agree with me that this was, in a way, "rational". In 1999, almost everyone was buying stocks, because they knew that buying stocks could get them to be wealthy, and this proved that the environment of buying the stock was hot. Therefore, this implies that the relationship between the environment and acting irrational of buying stock to be positive, which the environment influences individuals making their own decisions that perhaps becomes predictably irrational. In addition, not only the environment can influence our ability to make decisions, but also our emotions can have a strong impact due to the fact that environment and emotions are intercorrelated. One other experiment shows the positive correlation between emotions and our ability to make decisions was a group A of Berkeley students taking a test and a group B of students taking a test while being stimulated to a state of sexual arousal. Across the questions, students from Group B answered the question to be 72% more aggressive than Group A. This shows that we, in human nature, systematically underestimate and without the recognition for how the emotion can take control of our behaviors, and this can become the situation for our daily irrational behaviors such as driving faster when two or more teenager friends are in the same car. Therefore, this suggests the implication of the emotions and environments play an significant role when we are making decisions, and this expresses an idea that we are predictably irrational because our irrationality can be predicted through the environment and emotions in the manner of "where we are in".

Speaking of the environment in making economic decisions, policy makers in governmental systems play an essential role. Policy makers are crucial for deciding the main trend of how people will be responding, which means that those designed policies should aim for the public good. However, some of those designed policies are the starting point to create a "bubble" in an economic environment that might burst at any point. One of the examples would be the *policy of utilizing the ability of private enterprises and deregulation* in 1980, Japan [2]. At the time of the late 20th century period, Japan seek to increase their domestic demand, and thus this policy generated high profits for the private enterprises to promote urban development so that could eventually generate more demands domestically. Furthermore, the increase of domestic demand led to an even faster increase of the housing prices due to uncontrolled population migrating into the urban areas, and people started to think that buying houses could make them wealthy. For example, from 1984 to 1988, the housing prices had grown up 80%, and this means that if a person brought a house around 1984 and wait 5 years, then the total assets of him/her would grow up 80%, which was a lot of increased compared to the 2% annually interest rate in banks. Therefore, under the sign of "getting rich" just from buying houses, people are being placed in this hot environment that eventually causes them to be predictably irrational. According to a report, loans for land purchase amounted to 24.3 trillion Yen (about USD 93 billion) in only a single year [4]. In order to be understandable, if we divide this by the total population at the time in Japan, then this will give us a rough number to be 21,336 USD, and this number is approximate to be individuals holding a loan of USD 43,118 with the inflation today. Compared this number with the total average debts of 38,000 USD of individual Americans households in 2018, only property loans for individual Japanese of 1988 had already exceeded the total household average loans in 2018 of the USA. In other words, people were without being rational in this hot environment and lost their emotion to judge whether or not borrowing more money that they could afford was a correct decision.

A story from Mr.Nakashima recounts the real economic environment from the beginning in 1980 of Japan's housing bubbles till its end. Mr. Nakashima, a Tokyo city government, took out a loan for almost the entire USD 400,000 price of a cramped four-bedroom apartment [2]. Eventually, the loan of these amounts will still take Mr.Nakashima another decade to whittle down. After the burst of the housing bubble, Mr. Nakashima mentioned, "we can't sell and get something better because we'll take such a huge loss" in one interview. This means that the house is worthless after he had made the purchase, and implied a significant message that individuals will overlook the intrinsic value of an item once the outer environment is "hot". However, there might be a counter argument saying that it was the Japanese government promoting the "hot" environment, and thus the individuals shouldn't have a need to calculate the intrinsic value of an item. This counter argument is true but not in an absolute way, because the government might produce a good policy that might end up having negative consequences for the public implicitly. For example, although it's undeniable fact that seatbelt reduces 45% of risk in an accident, it is still skeptically true that seatbelt makes people feel safe and thus drive a lot faster than without, and it is causing more accidents than before when there were no seatbelt. This shows that the government might not always be correct all the time, and in the case of seatbelt, we really should reconsider the intrinsic value of seatbelt for which whether or not to have a worthy of production. This has an implication that if cars without seatbelt have less people die than cars with seatbelt, then there are no points of spending extra money and resources to produce more seatbelts. Therefore, this reminds us that individuals should be critical about the intrinsic value of any items, because this is the way for people to not get lost in the hot environments and emotions when they have the potential of behaving predictably irrational.

3.UPCOMING ECNOMICS BUBBLES

What about now? Should we be looking to protect ourselves from the next economic bubble because of the Coronavirus outbreak? In my following observation, these questions should be carefully considered. For example, the crash and halt of the US stock market in March 2020 became widely known for most individuals. The data reports that the Nasdaq had failed 20% more of its prices, and this was the prices of Nasdaq in 2017, which means that it lost 2 years of the growth. However, there are individual investors who think that it's the time to buy back the Nasdaq because they consider the intrinsic value of Nasdaq at this point is higher than the prices, which emphasizes that it will get back on track once the Coronavirus is over. Is this true? Are those individual investors behaving predictably irrational?

Let's re-examine the market environment before "rationally" following those individual investors' thoughts of buying back. According to the Federal Economic Data, the total asset of US dollars jumped from 4,100,000 millions in Feb 19 2020 to 6,400,000 millions in April 15 2020. This is almost a double increase of USD dollars in only two month, and this ideally will lower the purchasing power of the US dollar, but it didn't, because the US dollar is not only used by the USA but also has been used as an international dollar. Thus, even though we assume spending one dollar bill in your hand can buy an apple today and can also buy an apple tomorrow, it still generates more money in the market than you would normally think. The more money that the Federal Government printed ends up creating a hot environment that skeptically makes individuals feel the time of buying back. For example, growth of 25% of Nasdaq's price from 6,879 in March to 8,650 in April shows this trend of environments is "hot" [1]. Of course, there are Economists arguing against this by saying that monetary liquidity is essential that brings benefits to support the USA economies facing the issue of Coronavirus. if in fact it is true that monetary liquidity is essential in the current COVID-19 issues; however, it is still not giving the sign that the current intrinsic values are higher the market prices for individuals that they should buy back the Nasqad at this point. In order to narrow this idea, it is easy to look at the current situation with a comparison to the 2008 US financial crisis that the total assets of the US dollar was doing a similar thing that they tripled its total assets in just short periods from July 2008 of 880,000 millions USD to 2,136,924 millions USD in December 2008 [5]. This reinforced a similarity that the hot environments are present in both cases in 2008 and 2020 that people had less constraints in which they took less cautious towards the market, and thus created "upturned market monetary liquidity". As a result, the "upturned market monetary liquidity" in 2008 burst, and this hurt all people in any sectors who had invested their money into the market. So, reflecting back to the issue of whether or not the current Nasdaq generates a good sign to buy should depend on the intrinsic value of the market instead of depending on individuals' emotions that are being manipulated by the current hot environment from "unturned market monetary liquidity".

4.CONCLUSION

In some final words, our world has a limited amount of resources because there are trade-offs everywhere that individuals need to sacrifice. This emphasizes that if individuals only pay attention to the explicit side of the factors or overlook the implicit side of the factors such as the environment and the intrinsic value, then the trade-offs of the actions will come to be unexpected. In other words, individuals should improve their own independent thinking in making their decisions through understanding the idea for making our own decisions that they are neither random nor senseless---but they are predictably irrational in a systematic way. Lastly, regarding the issue of Nasdaq's potentials of growth in the future, we should still keep an optimistic view towards it. Although the claim for individuals to invest in the stock market is doubted in the short term, the USA will still be in the place for the world's largest economy in a very long time; until then, all of the skepticism for today will be removed. But the question left for individuals is: Should you wait?

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