Investment Environment has Changed, Natural Selection Makes Investors Pay More Attention to Liquidity

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Abstract. With the rise of global protectionism, de-globalization, Sino-U.S. Trade conflict, the instability of policies will increase the probability of tail events. In this paper, we mentioned the natural selection in the financial industry. In the past, the investment environment has been stable for a long time, it would cause some investors have not ability to respond to the crisis. Change some investment habits, and deal with the hold up and Bank run caused by the tail events with increased probability by retaining more cash flow. This method can enable us to effectively respond to market fluctuations caused by unstable policies and improve the success rate.

1. Introduction

Tail Risk is defined as the risk of an event that has a very low probability and is calculated as three times the standard deviation from the average normal distribution return. Standard deviation measures the volatility of an instrument concerning the return on investment from its average return. After the Sino-U.S. Trade conflict has taken place, the tail events' quantity is increase, which will create a different investment environment from the past. In this paper, we propose that the market is follow by the laws of nature. Today, more than ten years have passed since the last financial crisis which means that some fund managers have never faced or actively responded to a major crisis. These fund managers may be eliminated due to market environment changes in the future, which is a natural selection between fund managers.

We choose institutional investors rather than individual investors because they have two advantages. Firstly, institutional investors are more professional. They have abundant funds and are equipped with special departments for research and analysis. Secondly, institutional investors have enough capital to convert their investments into portfolios. Among different types of market participants, institutional investors may better understand the impact of the crisis on companies with different characteristics [2]. When the world economy is stable and the investment environment is good, when the tail event occurs, the foundation will show a greater aversion to smaller companies. if the tail event occurs, the world economy is stable and the investment environment is good, the foundation will show a greater aversion to smaller companies. Jacob, Gupta and Gopalakrishnan research illustrate that mutual funds have increased their allocation towards firms with larger asset size, lower CAPM beta, and lower book-to-market ratio[3]. At present, we need a new method to solve this problem. Because of unstable policies and frequent tail events, funds need to constantly adjust their investment strategies, which will increase the possibility of their mistakes. The psychology of investors needs to be considered when funds facing losses. If the crisis causes losses in investors' investment, some investors will choose to redeem their shares to stop loss in time. Therefore, the fund can consider maintaining liquidity to deal with tail risk and customer panic.

2. Changes of investment environment

The investment environment, including investment opportunities in production of different financial and real assets, various investment vehicles and alternatives. Among them, the seven elements of the investment environment are: Assets and investment vehicles, financial markets, market structures, market intermediaries, investment process, regulation, and economy [6]. In this paper, we believe that the changes in the investment environment are due to the changes in market structure and economics. Market structure refers to the structure of the market, including a series of financial instruments. In 2020, since covid-19, the Federal Reserve chose to issue excessive currency. In 2022, due to the previous excessive currency issuance, the U.S. CPI reached 8%, and the Federal Reserve chose to raise interest rates to curb inflation. During this period, U.S. government bonds received considerable attention. In economic, the global economic environment is weak. The International Monetary Fund (IMF) believes that the global economic situation in 2022 will be more fragile than previously expected. First, due to the COVID-19, war and other impacts, many countries are facing the

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continuous impact of shortages of energy, commodities, and daily necessities. Supply chain risks are growing worldwide, and supply chain bottlenecks are continuing. Second, inflationary pressure has increased. The epidemic has led most countries in the world to adopt expansionary fiscal policies to maintain economic and social operation. This fiscal policy promotes the formation of loose monetary policy through the expansion of government debt, forming inflationary pressure; The rising prices of upstream energy and raw materials will also further aggravate global inflation. Third, unstable and uncertain factors that affect peace and development still exist. Some countries have created contradictions and differences in the international community and provoked military confrontation. In the geopolitical hot spots such as Eastern Europe, Central Asia, the Middle East and North Africa, violence has occurred frequently and military conflicts have escalated, seriously endangering regional security and stability. On the regulatory front, before 2020, when the world is during economic easing and low interest rates on loans, many investors will choose to increase leverage in the hope of higher yields and returns. But after 2020, as a result of the pandemic and geopolitics, countries began to tighten their fiscal policies, lending rates rose and investors became less leveraged.

This paper argues that the reason for the increasing number of black swans is the information technology revolution and globalization. The information technology revolution and globalization had led to increased transparency of information, and the internet had made distances between regions disappear.

Globalization induces the global production division to be more diverse and subdivided, the global economic and trade activities become more and more frequent and intensive, and the world becomes a high-speed cooperative and high-speed network.

Once there is a regional black swan event at this time, it will soon spread across the globe through this collaborative network, forming a larger global black swan. The 2008 financial crisis emerged from the United States and then spread to the world; 18,19 years of Sino-us trade friction, resulting in Sino-us trade disputes, directly affected the global economic and trade slowdown; The covid-19 pandemic, which began in 2020, spread to countries around the world as a result of globalization, and changed from a regional epidemic to a global pandemic, resulting in a global economic shutdown and recession. In contrast to the SARS epidemic in 2003, when globalization was far less developed and people-to-people exchanges were so intense, the SARS epidemic was only regional and had only a limited impact on Southeast Asia, just a black swan with limited influence. Now basically any major regional black swan event in any major economy in the world will almost certainly turn into a global black swan event and trigger global turmoil.

In other words, because of the internet and economic globalization, leading to global black swans will increase the number and become larger.

The change of investment environment is also related to the progress of science and technology, globalization and informatization.

3. Natural selection

It is similar between the market and natural. In the natural selection, process that results in the adaptation of an organism to its environment by means of selectively reproducing changes in its genotype, the properties preserved in creatures are all made by fitting into the past environment[7]. the performance of the market price in the past will impact the current investors risk preference[5]. are heavily influenced by limited attention and past return performance in their purchase decisions[8]. There is inertia in asset allocations[9], if investor could not change their strategies, they return will be influenced by the changed environment. And the probability of these people will be eliminated by the market due to many losses caused by this change in the environment. Facts have proved that when the sample size of tail events is large enough, the probability of investors cannot affect the winning rate through luck for a long time, and the performance of investors will be closer to the result of natural selection.

4. Liquidity issues

When the financial crisis is coming, ensuring liquidity is always one of the best means for mutual funds to decrease risks. Liquidity can enable funds to make profits through systematic risks and. mutual fund will not sell its assets at a price lower than its value due to lack of liquidity, it can prevent mutual funds from selling fund shares due to the psychological fluctuations of investors, which leads to mutual funds need to sell assets at a low price in exchange for liquidity. There are three reasons for the lack of liquidity in the face of the crisis. The first is that the fund manager failed to realize the funds in time to deal with the redemption problem of investors. The second is that the portfolio is difficult to realize. The third is that the feedback mechanism of the stress test report and the assessment accountability mechanism were not properly established. When the crisis comes, the fund must face its value will be discounted if the fund wants to sell assets in certain crisis affected industries. Shleifer and Vishny described that when a company had to sell its assets due to financial difficulties, the buyers with higher prices should be enterprises in the same industry [1]. When a financial crisis or tail event occurs, it will inevitably affect the entire industry, which will lead to investors who hold cash and are willing to buy these assets hoping to buy them at a cheaper price. Those who do not engage in this industry have low interest in such assets, and their prices will be lower than their original values. This will cause a lot of losses to enterprises. Funds and enterprises are the same, When the fund holds an asset and its price fluctuates due to negative news in the industry, the fund principal needs to discount the value of the asset if he wants to sell it and pay higher value if he wants to get liquidity faster.

In general, the market is not effective, and investors cannot be rational. When tail risks occur, which leads to losses in the funds or assets held by investors, losses will affect investors' emotions, thus affecting their decisions. Some investors will choose to redeem shares. This is when public funds manage their liquidity risks, Fund managers will pay attention to the matching and balance between the liquidity of the fund's portfolio assets and investors' redemption needs. According to new research, If the fund is faced with insufficient liquidity when the crisis comes, mutual funds may face the situation of insufficient liquidity, at this time, most funds respond by realizing the most liquid assets[3]. Simutin research describe that cash may be the best choice for the fund. The fund with high abnormal cash can benefit from its flexibility. Although holding cash has costs, low abnormal fund lacks the flexibility compared with high abnormal funds. Managers with large amount of abnormal cash make more rational and excellent stock selection decisions to make up for the low return on cash [10].In combination with the problems described above, the change of investment environment will increase the probability of liquidity risk of the fund in the future. If the fund has insufficient liquidity and wants to sell assets, the fund will pay a higher price, so the fund should try to Maintain high abnormal cash to get more benefits.

5. The link between low-risk assets and high-risk assets

Some financial assets, in large quantities (whether bought or sold), also have large price fluctuations, such as stocks, futures, etc. Their high returns are at the expense of low returns. Therefore, fund managers tend to high-yield high-risk assets and low-yield risk-free or low-yield low-risk assets together to form a portfolio. These low-risk assets have some characteristics and commonalities, such as: high liquidity. As a result, mutual funds have responded to the crisis by selling highly liquid assets in the face of sharp market volatility. The highly liquid assets selected by the fund are likely to be highly rated, liquid treasury or corporate bonds, government bonds, repo agreements, and so on.

Fig. 1. United States Stock Market Index (US500)[4]

Fig. 2. US 10 Year Note Bond Yield(percent)[4]

Under the theme of changing investment environment, we think it is necessary to consider a liquidity-related issue, that is, whether it is efficient enough to solve the liquidity problem of fund by selling bonds and so on. Looking at the 202010-year dollar bond curve, we see the bond sell-off in March, with yields rebounding from a low of 0.4% to 1%. There are clearly other reasons for the volatility of us treasuries without government intervention. Combining 2020 U. S. Stock data, we found that the rapid rebound in treasury yields in March was due to a massive sell-off by investors. The large-scale sell-off of Treasury bonds should be caused by the continuous collapse of U. S. stocks and repeated circuit-breakers, triggering market panic and collective selling, thus creating a liquidity crunch.

With low lending rates, many institutions and individuals have used low-interest leverage to invest against a background of global deregulation. With us stocks falling fast, leveraged investors must raise money quickly to fill margin gaps, or they will be forced to unwind their positions. We all went around raising money together. The market was short of money, so they had to sell highly liquid assets in exchange for cash. The raw volatility of these assets, such as US bonds and gold ETF, was not closely linked to equities, so they were used as allocation tools to hedge risk. This time, however, the market fell so fast that no one was prepared and there was a liquidity crisis with a shortage of funds. These highly liquid assets were also used in the bailout and pulled out of the same downward trend as stocks. This makes us question the viability of choosing highly liquid assets as a hedge against risk. In an environment of increased tail event probability, the volatility of U. S. stocks will also be more intense, the price of highly liquid assets such as bonds will also be greatly affected. For the fund, some assets in addition to hedge risk, that is, when the fund lack liquidity risk, through the sale of assets to obtain liquidity.

In the future, funds could try to manage hedging and liquidity protection separately, use of financial instruments for hedging purposes, and provide adequate cash flow in terms of liquidity. Cash flow enables the fund to react quickly and avoid risks in today's investment environment.

6. Conclusion

Due to the high flow of information, globalization and other reasons, tail events happen more frequently, this trend may evolve into a long-term state. As mentioned in the previous article, there is natural selection among investors, which in the past would affect the risk decision-making of investors now, and changes in the investment environment and cycle would increase the volatility of the market, investors and funds need to pay more attention to market risk. A change in market conditions will weed out some investors. Previous funds have been able to reduce losses by swapping assets for shares in high-quality companies, but we can also choose to hoard enough abnormal cash to hedge risk, raise incomes, and cope with the demand for liquidity that comes from market pessimism, making a profit in this way may be the right choice for this investment cycle. The preparation of high abnormal cash can provide more security for the fund. This advice may smooth the way for investors to deal with natural selection.

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