Reviews of Financial Markets in the GFC and Covid-19 Evidence and Lessons for Financial Assets' Allocation in Post Covid-19 Pandemic Era

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ABSTRACT

The Global Financial Crisis (GFC) and Covid showed quantities of similarities and differences in terms of financial market and financial assets, but these characteristics occurred under multi-factors. Current research mostly focuses on single profiles of both crises and interprets them in a siloed way, but such statement fails to explain the inherent connections of different components in both crises, thus failing to serve investors in a macro way. By stating and analyzing financial changes from the perspective of comprehensive review, this paper will explore the common misconducts prior to both crises and reveal the inevitability of financial crisis. Subsequently, this paper will present data of financial assets' returns in respective crisis and compare them to unveil the effectiveness of traditional safe havens and remind investors of alternative instruments. In fact, most safe havens will not work as perfect shelters in case of crisis and investors have to change their investment decisions. Ultimately, this paper will refer to corporate and government remedy plans to cope with the GFC and reveal the rationale of R&D and governmental support. At the same time, this paper will expose current soaring inflation and warn investors of their investment positions. In conclusion, quasi-cash and illiquid instruments will gain popularity in the future crisis.

Keywords: *Review, GFC, Covid, Investment decision, Asset allocation*

1. INTRODUCTION

1.1. Background

In 2020, a global pandemic called Covid-19 shockingly spread to all over the world. Consequently, the severity of the pandemic and the lack of efficient approach enabled the world to experience chaos and smashed the global financial system. Under the persistent disruption of pandemic, the global financial system collapsed in the company of shrinking demand and broken supply chains, thus interrupting major stock markets and devaluing various financial assets. Meanwhile, investors tended to move their assets to safe havens due to risk aversion and interest push, and as a result, the financial markets turned volatile.

The financial markets were so fluctuated and messy that policy makers almost simultaneously recalled the GFC in 2008, when defaults in the subprime mortgage market led to the damage of global financial system. In fact, both events featured some similar characteristics, such as stock plummet and liquidity depletion. However, the two events belonged to distinct crises. Simply speaking, the GFC was an endogenous event triggered by financial inappropriateness, while the Covid-driven financial disturbance was an extraneous crisis resulting from a health event.

Despite the essential difference of both crises, they represented considerable shifts in the financial market such as market structure and assets' returns, and subsequently, it was market participants' efforts to inject liquidity and reform improper financial rules and systems that rescued the financial market out of further tumble. However, investors' current positions and future expectations permanently changed, thus impacting nearly all assets' performance and tendency. Therefore, without holistic acknowledgement of financial crises and changes in asset allocation, investors are unable to maintain the value of their assets and capture brilliant investment opportunities in the next stage.

1.2. Related research

Longworth et al. reviewed shortcomings in the

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financial market prior to the GFC and Covid, including risk ignorance and system regulation. Nearly all improper rules and systems could be ascribed to misconducts performed by market participants before crises. Heller et al. pointed out misconduct parallels of both crises and expected according misconducts before and in the Covid. Since Covid spread so widely in a short period of time, economic uncertainty instantly soared. Kinateder et al. compared the performance and correlation of safe-haven assets such as bonds and commodities in the GFC and Covid by using mathematical models and reminded investors of major changes in assets' returns. Cheema et al. collected returns of various safe-haven assets and explored their statistical characteristics and correlations. Due to similarities of both crises, researchers were devoted to drawing effective measures taken after the GFC to cope with Covid. Wilkins et al. reviewed Australian government's economic stimulus plans in the GFC and contended that typology of previous measures could be applied in the Covid. Roper et al. discovered a strong correlation of R&D and crisis and reviewed the fact that UK ever experienced surging innovation craze after the GFC and succeeded in going through crisis. Meanwhile, researchers also stressed the importance of financial support for innovation.

1.3. Objective

This paper will excavate and debunk the deficiencies of previous financial market and misconducts performed by market participants before the occurrence of the GFC and Covid and generalize the common issues in both crises to reveal the necessity of financial crisis. Next, relevant data about financial environment and financial assets will be presented, including VIX index and asset returns. Based on statistical data, this paper will narrate relevant changes and discuss some explanations to stress major financial shifts. Lastly, by reviewing governmental assistance to the GFC and stressing inflation surge, this paper seeks to find ways to cope with Covid and remind investors to manage their assets.

2. BEFORE THE GFC AND COVID-19

Whereas both events were descended from fundamentally discrepant factors, it was the lax financial management and ignorance of risk and crisis that prompted the financial crisis to involve nearly each corner in the world. Therefore, common features were still able to be extracted, sufficiently explaining the inevitability of financial shock even without igniting factors.

2.1. Misbehavior before the GFC

The GFC in 2008 radically originated in terrible faults of subprime mortgage loans. Before the GFC, the housing price displayed a steady rising trend and the stock market was in a normal condition, fully erasing any notion that any crisis might occur. At that time, financial institutions such as banks indulged in such economic prosperity without any solid ground and convenience to receive commission fees, so they encouraged issuing mortgage loans to almost anyone regardless of borrowers' credit records. At the turn of 2008, loads of houses were left vacant and the value of them declined sharply, inhibiting borrowers' motivation to pay back their loans. As a result, lots of financial institutions failed to revamp their returns so that the whole financial system suffered a severe subprime crisis.

Strictly speaking, the occurrence of such crisis was not based on dramatic macroeconomic changes but based on systematic flaws in financial world. And the flaws in the financial system were accused by mortgage-backed securities (MBS)-a financial tool issued by financial institutions to make money-and other financial derivatives. Firstly, investors charged financial institutions with being addicted to acquiring benefits and transferring their risks to the whole society, since the transactions of MBS only involved investors and loan borrowers and banks merely acted as a paid bridge maker to promote transactions. Secondly, financial institutions chose not to disclose the nature of MBS and other derivatives' returns even though the values of these financial products started to decline. In view of this, financial institutions failed to comply with professional standards in financial industry and allow investors to exercise supervision. Thirdly, rating agencies such as Moody's improperly gave high grades to MBS for the sake of benefits and "stable" relations with major financial institutions, though they were able to identify the devaluation of MBS [1].

2.2 Misconduct before Covid-19

A decade after the GFC, another heavy blow-Covid-19-in financial world broke out abruptly. Generally speaking, the whole financial world should strengthen its financial risk management after experiencing a deadly crisis in 2008, and in addition, Covid-19 was an extraneous trigger for a financial crisis, so that there was no reason that catastrophic crisis ever occurred again. However, the fact was that while the GFC primarily cracked down on mortgages and related financial products, the outbreak of Covid-19 had wider damaging ranges covering more sectors and industries.

Such tragedy must engender investors to contemplate whether outside impacts grew more fierce or inner financial coping mechanism still had drawbacks that had been existing since the GFC. After researchers investigated and reviewed the financial market before Covid-19, a conclusion that corresponded to the latter hypothesis could be made.

Before Covid-19, quantities of poor financial architecture that existed pre-GFC still lingered. As is known to all, these institutions were confronted with ratings downgrade and failure to meet margin calls, thus directly defaulting on their debts. At the same time, the collateralized loan obligations (CLOs), which were noted for their diverse investments and safe characteristics after the GFC, were also downgraded because they failed to recoup their cash. Therefore, CLO holders went into panic and sold CLO positions in bulk, thereby decreasing their value. Strikingly, S&P noted that market challenges that existed before Covid-19, including high-leverage ratios, EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortization) add-backs and covenant-lite loans, which are a type of financing that is issued with fewer restrictions on the borrower and fewer protections for the lender, were causing speculation that this might be the perfect storm for CLOs [1].

2.3 Malpractice in both the GFC and Covid-19

Many problems exposed during the GFC and Covid-19 showed that financial regulators and institutions did not take strict measures to cope with financial shock. According to some research, both crises demonstrated parallels in the lack of sufficient capital and liquidity requirements, public disclosures, advance planning, stress testing, attention to warnings and appreciation of what could go wrong and how problems could be spread [2].

3. DURING THE GFC AND COVID-19

3.1 Data and results

As is often the case, turbulent moments triggered by any detrimental event in the financial markets always oblige quantities of investors to transfer their investment instruments from high-risk and high-yield products such as stocks and derivatives to products with stable return and less volatility, called safe havens defined as assets with zero or negative correlations with other assets, since there is no better choice for investors to stop their loss and maintain the value of their positions. However, elaborate analyses conducted by experts and researchers have revealed that safe havens are not always satisfactory, depending on contexts of special financial markets and structure.

As is known to all, any internal or external disturbance is likely to change investors' decisions, thus reshaping the performance of ranges of financial assets. Essentially speaking, market shock deals a heavy blow on value of financial assets by incurring investors' fear and expectation variation. One of the most useful measures to quantify such fear is to introduce Chicago Board Options Exchange's (CBOE) Volatility Index (VIX) [3].

According to researchers' study on VIX indexes on the most turbulent days in the GFC and Covid. Both VIX indexes show a dramatic volatility with several peaks and troughs. At the very beginning of both crises, VIX index was stable since investors failed to sense any abnormality in the market. However, with the expansive outbreak of crises, such as the bankruptcy of Lehman Brothers in September of 2008 and the declaration of Covid-19 as a global pandemic by the World Health Organization (WHO), the whole financial system was under attack, resulting in huge uncertainty and panic among investors. As a result, in the middle stage of crises, both indexes reached a peak in reaction to concern about the financial environment and future. Subsequently, VIX indexes became more stable and eventually returned to normal, resulting from market regulation, economic stimulation and reviving confidence. Although VIX index fails to provide direct data of financial assets, it generalizes an overall context in which investors' emotions change, and helps investors adjust their investment decisions to market mood in a prompt manner.

Although VIX index provides a reference for investors to analyze safe havens, it unavoidably illustrates a disadvantage. Both indexes achieved spikes around scores of days, exposing a lagging effect of crises in the financial markets. Therefore, to make a rapid response to instantly changing financial market and evaluate the potential safety of safe haven assets, investors have to refer to stock market such as S&P 500, a representative of global economy, to compare the returns of stock market with those of safe haven assets. Henceforth, relevant data about returns and losses of financial assets in GFC and Covid-19 crisis are displayed as follows.

Table 1 shows the performance of safe haven assets on the 10 days of largest losses of S&P 500 Index during the GFC from Sep. 12, 2008 to Jun. 30, 2009 [4]. As is apparently showed in Table 1, safe haven assets report at least 5-day positive returns during the 10 worst days in S&P 500 Index, fully proving that the safety of safe haven assets played a vital role in maintaining the value of investors' assets that would otherwise be severely hit by stock market plunge.

Table 1. Extreme Losses of S&P 500 Index and other assets in the 2008 GFC

Date	S&P500	Gold	Dollar	T-bills	T-bonds	AAA-bond
29/09/2008	-9.1957	1.0182	0.6735	0.0383	1.0869	0.4862
07/10/2008	-5.9099	1.6085	-0.873	-0.0311	-0.3688	-0.0186
09/10/2008	-7.9213	-1.7386	0.3085	-0.0022	-0.5696	-0.9663

15/10/2008	-9.4595	0.9804	0.8445	0.0286	0.1388	-0.3711
22/10/2008	-6.2739	-3.352	1.6297	0.0144	0.2709	0.6857
05/11/2008	-5.3515	-1.3494	-0.2007	0.0212	0.296	0.7461
19/11/2008	-6.299	1.3455	-0.0687	0.0149	0.5529	0.268
20/11/2008	-6.9437	0.1402	0.7531	0.022	0.9695	-0.1159
01/12/2008	-9.3469	-4.9181	0.2309	0.0206	1.056	0.9978
20/01/2009	-5.4254	3.188	1.4459	0.0024	-0.134	-0.2581

In the same way, Table 2 demonstrates the returns and losses of safe haven assets on the 10 days of largest losses of S&P 500 Index during the Covid-19 pandemic from Feb. 20, 2020 to Dec. 31, 2021 [4]. Safe haven assets at least prevented such losses as those in the S&P 500 Index even though positive returns did not occupy a large proportion in all available data.

Table 2. Extreme losses of S&P500 Index and other assets in the Covid-19 pandemic

Date	S&P500	Gold	Dollar	T-bills	T-bonds	AAA-bond
27/02/2020	-4.4961	0.5208	-0.4962	0.0216	0.3753	0.1568
09/03/2020	-7.89	-0.1386	-1.1004	0.0219	0.7507	0.1945
11/03/2020	-5.0028	-0.3124	0.1037	0.0129	-0.2965	-1.3524
12/03/2020	-9.9726	-4.8792	0.9898	0.0182	-0.267	-1.7597
16/03/2020	-12.7605	-1.8931	-0.691	0.0182	1.549	0.9732
18/03/2020	-5.3221	-3.224	1.5843	0.0309	-1.0609	-1.5417
20/03/2020	-4.4154	0.7773	0.0584	0.0037	1.7886	0.4572
01/04/2020	-4.5139	-1.5176	0.624	0.0035	0.3196	0.5947
11/06/2020	-6.0631	1.4106	0.7992	0.0014	0.3595	0.1696
28/10/2020	-3.5926	-1.4611	0.4937	0.0001	0.0221	-0.0249

In all, detailed comparison of data on asset returns during the GFC and Covid-19 pandemic indicates that stock market vibrated more sharply in the Covid-19 pandemic than in the GFC, since extreme losses in the former showed greater volatility. Nonetheless, gold, an alleged safe asset during the market intense fluctuation, turned disappointing in the Covid-19 pandemic because it only recorded 3 days of positive returns out of 10 while it reported 7 similar days in the GFC, during which gold acted as an enhanced safe haven. Such contrasting results serve the evidence that even the best instrument considered capable of hedging volatility risk can also encounter expectation limit, namely that no asset is almighty enough to deal with any problem in the financial market.

Intriguingly, the safe-haven efficacy of dollar asset, once called the world currency, was curtailed to some degree during Covid, since according to Table 3, the average return of dollar asset declined a little and became more volatile in the Covid-19 pandemic.

Table 3. Descriptive statistics of asset data in the GFC and Covid-19 pandemic

Panel A: Descriptive statistics of asset data in the GFC						
	S&P500	Gold	Dollar	T-bills	T-bonds	AAA-bond
Mean	-7.2127	-0.3077	0.4744	0.0129	0.3299	0.1454
Variance	2.6869	6.2110	0.5762	0.0004	0.3459	0.3635
Coefficient of variance	-0.2273	-8.0994	1.6001	1.5504	1.7828	4.1466
Panel B: Descriptive statistics of asset data in the Covid-19 pandemic						
	S&P500	Gold	Dollar	T-bills	T-bonds	AAA-bond
Mean	-6.4029	-1.0717	0.2366	0.0132	0.3540	-0.2133
Variance	8.6299	3.7465	0.6834	0.0001	0.7296	0.9388

Coefficient of variance	-0.4588	-1.80609	3.493999	0.757576	2.412899	-4.54251

Table 3 report implies that treasuries turned prospective safe options for investors to go through the crises, since both results report stable returns. However, treasuries, whether T-bills or T-bonds, served as a weak hedge during the two crises, because of extremely low returns despite low risk. It was this nature of treasuries that determined that treasuries were insufficient to obviously cover huge losses in the stock market.

As is known to all, corporate bonds undertake greater credit burden than treasuries do, so in this case, corporate bonds tend to behave less encouraging when financial catastrophe occurred, as is indicated in Table 3.

3.2 Discussions

According to the data and results above, it can be easily seen that financial assets surely change as time goes on, and that financial assets even once deemed as safe options for investors during crisis can radically lose their protective effects and fall into discarded assets. Therefore, what on earth propelled such transition is worthy of being explored. Here, some analyses will be given to warn potential investors of variant financial markets and assets.

First of all, S&P 500 Index, an epitome of the most mature stock market, displayed considerable robustness in the Covid-19 pandemic, which allegedly had broader and more severe effects on the financial market than GFC did, whereas average returns inevitably showed negative and more dramatic volatility in the Covid-19 pandemic than in the GFC. Clearly, global financial market, primarily banking industry and securities institutions, ever underwent strict and granular regulation from local and global financial organs, after GFC broke out and new versions of Basel accord, a new document drawn up to intensify regulation of financial market and enhance risk management, were issued. Consequently, financial institutions and non-financial companies, particularly valued corporations, retained more cash and low-risk and high-liquidity short-term monetary assets, which helped companies to go through liquidity-dry period, and thus stock market went more stably in the following decade. Nonetheless, with the increase of listed companies and market trade participants, stock market doubtlessly would become more volatile. Though stock market will involve more participants, its fundamental situation will also tend to be prosperous.

One of the most surprising results is the performance of gold in the two crises, because gold seemed to lose its safe-haven effect in the Covid-19 pandemic. Usually, gold is rated as one of the most secure safe-haven assets and exhibited exceedingly perfect hedging effects in the crises before Covid-19, such as 1987 stock market crash and the 2008 GFC. However, gold in the Covid-19 pandemic failed to stabilize the crazy financial market since it only reported 3 out of 10 positive returns while it recorded 6 out of 10 positive returns in the GFC. Such shocking failure in gold performance could be attributed to investors' lost trust in gold safety and emergence of cryptocurrencies such as bitcoin. As a result, gold, as a physical precious metal, was increasingly replaced by novel virtual assets with high yields. To some extent, gold has lost its safe-haven feature and is not expected to work as a safe asset during extreme financial crisis [5].

Moreover, USD performed less satisfactorily during the Covid-19 crisis, in contrast with investors' notion that USD was worth holding in the financial crisis since, as a world currency, it still played a part in transaction of commodities and services. As for the reasons for disappointing hedge of USD, specialists concluded that international trade declined in the financial crisis, and so did activities on foreign exchange markets. International trade was severe affected by shrinking demand and broken supply chains in the Covid-19 pandemic, thereby intensifying uncertainty in the foreign exchange market. In addition, in the past few years, other currencies have gradually taken place of USD to participate in international trade, with the sway of USD domination in the trade settlement. As a consequence, USD will never be regarded as a necessary currency and asset to deal with business issues.

If there was any asset able to hedge against turbulent crisis, US treasuries had something of perfect instruments since they remained rigid and robust even in the extreme moment during the two crises. One of the most widespread common senses is that US securities are typically considered the safest investment position. And the fact in the two crises also proved that US treasuries generated preservation for assets' value under the endorsement of US government. However, corporate bonds seemed to let investors down in the more severe Covid-19 crisis since corporate operations were in sync with macroeconomic situation. If stock market crashed in the financial crisis, corporate assets suffered enormous losses, thereby injuring cash inflows provided that corporations failed to keep enough cash.

To sum up, according to analysis of financial assets above, investors should adjust their investment positions in a timely manner in accordance with changing financial market and public expectations. One of the most instructive theories is no better than theory of assets allocation, which has experienced four iterations in the past century. In the 1950s, Markowitz put forward mean-variance model, which is considered the foundation of modern portfolio investment, thus propelling the assets

allocation to convert to quantitative consideration [6]. In the last decade of the 20th century, Bridgewater devised risk parity model, instructing investors to allocate their investment all day. Next, in the first decade of new century, Merrill Lynch came up with the Investment Clock, a model based on regulated variation of different assets in different economic cycles [7]. Finally, after the GFC in 2008, modern portfolio theories received universal suspicion, so a theory called multiple assets strategic allocation came into existence. As for the theories of modern investment, the Investment Clock seemed more direct than other three since it contains fewer variants and quantitative coefficients and is easy for investors to understand and practice. Therefore, based on the Investment Clock, presently investors should invest their positions into stock market and sovereign bonds since most countries are now executing economic stimulation and setting foot on economic recovery. Besides, alternative investments such as property and cryptocurrencies are also worth taking into account because traditional safe assets such as gold and USD are going far from trust. In view of the stability and low-liquidity of alternative assets, investors can hold the belief that alternative assets maintain the potential to preserve the value of their assets.

4. AFTER THE GFC AND COVID-19

4.1 Reviews of financial remedial measures taken during and after the GFC

Since the GFC in 2008, for the most part, firstly wounded the western developed economies, economic performance in these countries underperformed far below public expectation. However, because mature and robust measures were adopted by rich countries and worked well to cope with the economic downturn, it is necessary to analyze them to draw some inspirations and lessons for other countries and the whole world.

The aftermath of GFC persisted for many years, inhibiting many companies, particularly small ones, from financing from investors, so small enterprises were unable to continue to rise. As Schumpeterian growth models indicate, R&D investment over the business cycle is counter-cyclical, because economic crises stimulate new innovation by decreasing factor prices and creating a stock of idle resources. In other words, if firms are confronted with cash insufficiency and credit dry-up, R&D investment proves a procyclical approach and even the only way to go through crises. In addition, some findings suggest that if companies that were deprived of liquidity and timely assistance from other institutions participated in R&D investment, their stocks would rise above the average and be faster to recover from crises. One possible explanation for their rapid recovery is that R&D investment during the economic or financial crisis is correlated with product reallocation, that is, companies start to locate new resources to revive their operations and discard the operations proved inappropriate or outdated [8].

Furthermore, it is far from satisfaction and practical application to apprehend such tedious theories, so what is more comprehensive and persuasive is undoubtedly special experience of successful application. Next, inspirations of wealthy nations will come to the scene.

According to some data statistics and analysis, in the UK, the percentage of innovation-active firms-those either innovating or investing in innovation declined dramatically before and during the GFC and aggregate levels did not return to their pre-GFC levels. Nevertheless, levels of innovation activity in large companies succeeded in recovering to and even above those in the pre-crisis period, possibly because large corporations were more capable of restructuring their stale products, services or processes and innovating new ones than were small and medium companies. What’s more, a new version of Basel Accord was issued after summaries of past corporate shortcomings and discussions of multi parties to regulate corporate operation and financial market after the GFC, so a large number of enterprises decided to reform their rigid management system, strengthen their regulation for capital adequacy and optimize their governance, that is to say, corporations were also seeking non-financial ways to forge a stable environment.

Of course, corporate measures were not complete to take a glance at the whole economy of post-crisis remedies. Governmental stimulus plans also took effect in the economic recovery after the GFC.

Governments of developed economies firstly announced a series of stimulus packages of billions of dollars, next injected them into sectors that were scarce of liquidity and enterprises that were almost bankrupt, financial institutions and manufacturing industries in particular, and then invested in other aspects such as employment and infrastructure, hoping that such stimulus plans would rescue the economic dormancy and stabilize the economy. Usually, economic stimulus plans were executed with clear and measurable objectives and explicit design principles, ensuring that plans made a difference at each stage and in different sectors.

4.2 Exploration on the policy persistence of GFC and inspiration for the post Covid-19 restart

A decade later, another crisis called Covid-19 struck the whole financial system which was always compared with the GFC in 2008, since both crises destabilized the economy and exposed problems still existing in the financial systems. Therefore, successful measures taken in the GFC to solve the problems are worth reviewing to provide some references for post-Covid revival.

As is mentioned above, companies with innovation cognition and practice can better get rid of the effects of crisis and return to normal whether in theory or in practice, and the case is vividly seen in the GFC recovery. Due to the similarities of GFC and Covid-19, consistent innovation is still a medicine for companies to overcome the obstacle. Besides, innovative activities need huge amounts of cash, so large and noted enterprises are able to deal with difficulties. This can be proved by the evidence from the GFC indicating that companies with sufficient cash recover more quickly and stably. Numerous studies have found that the financial positions of firms before crisis will influence ultimate outcomes that whether firms could recover as soon as possible, especially among small and medium enterprises.

Despite the optimistic overview of innovative activities, external support such as governmental assistance proves inevitable because the hatch of innovative and remedial ideas requires regulated market order and extensive social acknowledgement. In the wealthy nations, after the GFC, governments ever drew the weak market back by strengthening the legal execution to maintain the integrity of financial institutions and curtaining tax burden faced by companies to support their operations. Governmental remedial plans can be applied more widely because of the similarities of governmental responsibilities in developed and underdeveloped countries and of both crises. Two of the most typical examples are the UK and Australia. As part of its response to the Covid crisis, the UK government adopt significant measures to support the UK businesses including a furlough scheme to ensure employment as much as possible and guaranteed business loans to support corporate innovation [8]. And to overcome the obstacles set by Covid-19, the Australian government announced stimulus package of billions of dollars to maintain employment and businesses, including unemployment benefits and support for SMEs [9]. Besides, the responses to Covid received bipartisan support and involved local governments, an unprecedented scope in terms of economic stimulus plans.

Apart from the mentioned measures above, one striking feature, inflation, showed up after the outbreak of Covid and it appeared more intensely in Covid than in the GFC, as is seen in Figure 1 [10].

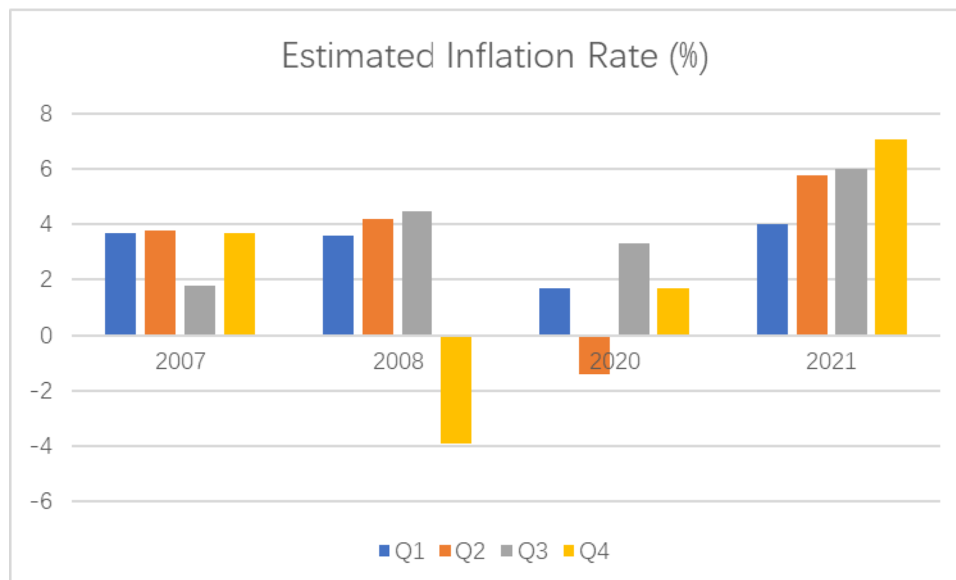

Figure 1. Estimated inflation rate in the GFC and Covid-19

One type of common sense reveals that inflation propels the rise of interest rate and depresses the value and returns of the majority of financial investment. In the first half of 2020, widespread panic and uncertainty of future permeated across the world, thus halting the production and demand. To revitalize the economy and consumption, developed economies such as the US adopted a measure of quantitative easing and put enough funds to affected industries, hoping to protect them from bankruptcy. However, excessive issued currencies devalued the money, thus resulting in persistent inflation, which proved fiercer than that in the GFC due to Covid's more extensive effects. Therefore, traditional safe-haven assets, mostly high-liquidity ones, would gradually lose trust because these assets were so easily exchanged as to be regarded as cash, while alternative investment such as property and cryptocurrency tended to be popular with investors owing to value stability.

To sum up, traditional safe assets might not shelter investors from financial collapse with the more severe crisis occurring, and investors should not bet some sort of asset classes but exercise a more diverse investment and seek more lucrative financial instruments.

5. CONCLUSION

This paper has analyzed the GFC and Covid from beginning to end and elaborately discussed asset changes to call on investors to pay attention to their asset allocation and new investment opportunities. By reviewing misconducts prior to both crises, this paper has detected amazing parallels including insufficient liquidity and risk ignorance, which exposed the inevitability of financial crisis. What's more, this paper has presented and interpreted relevant data regarding asset returns and come to some conclusions in contrast with previous perception. VIX index assumed a considerable lagging effect and fluctuated only in extreme events such as the collapse of financial institutions and the announcement of global pandemic in both crises. Stock market still demonstrated robust characteristics in the company of the enhancement of financial regulation and the improvement of market competition. Gold seemed to gradually lose attraction as a safe option for investors because of decreasing trust and apparent scarcity. USD also lost appeal as a result of deprived dominance in the world market and wide use of other currencies. As one of the safest assets, US treasuries performed better in a more severe crisis under the guarantee of US government. In addition, this paper has explored the applicative value of the Investment Clock theory and recommended that the theory can effectively guide investors to capture the economic cycle to make investment decisions. Lastly, this paper has reviewed effective remedies after the GFC, stating that the R&D and governmental support managed to help developed countries get away with the aftermath of financial crisis. Meanwhile, this paper has warned investors of unprecedented inflation occurring after the Covid and called on investors to make wise investments.

REFERENCES

[1] J. Heller, G. Phillips, Will the covid pandemic spark a return in GFC-type financial market litigation, Law and Financial Markets Review, 2020. DOI: info: doi/10.1080/17521440.2020.1788264

[2] D. Longworth, F. Milne, Parallels between financial regulation prior to the global financial crisis and lack of public health preparation prior to Covid-19, Working Paper.

[3] H. Kinateder, R. Campbell, T. Choudhury, Safe haven in GFC versus Covid-19: 100 turbulent days in the financial markets, Finance Research Letters, vol. 8, 2021. DOI: https: //doi.org/10.1016/j.frl.2021.101951

[4] M. A. Cheema, R. W. Faff, K. Szulczuk, The 2008 global financial crisis and covid-19 pandemic: how safe are the safe haven assets, Social Science Electronic Publishing. DOI: https: //doi.org/10.2139/ssrn.3642945

[5] M. B. Hasan, M. M. Rashid, M. K. Hassan, Y. Alhenawi, Are safe haven assets really safe during the 2008 global financial crisis and covid-19 pandemic, Global Finance Journal (Accepted), 2021.

[6] Baidu. (n.d.). Portfolio Theory. Retrieved April 4, 2022, from https://baike.baidu.com/item/%E6%8A%95%E8%B5%84%E7%BB%84%E5%90%88%E7%90%86%E8%AE%BA/6602455?fr=aladdin

[7] Baidu. (n.d.). The Investment Clock. Retrieved April 4, 2022, from https://baike.baidu.com/item/%E7%BE%8E%E6%9E%97%E6%8A%95%E8%B5%84%E6%97%B6%E9%92%9F%E7%90%86%E8%AE%BA?fromtitle=%E7%BE%8E%E6%9E%97%E6%97%B6%E9%92%9F&fromid=18777762

[8] S. Roper, J. Turner, R&D and innovation after Covid-19: what can we expect? A review of prior research and data trends after the great financial crisis, International Small Business Journal: Researching Entrepreneurship, vol. 38, no. 6, pp. 504-514, 2020. DOI: https: //doi.org/10.1177/0266242620947946

[9] P. Wilkins, D. Gilchrist, J. Phillimore, Independent review of emergency economic stimulus measures: global financial crisis and Covid - 19, Australian Journal of Public Administration, vol. 80, 2021. DOI: https: //doi.org/10.1111/1467-8500.12437

[10] BEA. (March 30, 2022). GDP Price Index. Retrieved April 6, 2022, from https://www.bea.gov/data/prices-inflation/gdp-price-index