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Investments under the Global Economic Policy Uncertainty: A Literature Review

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Abstract: The literature review examines the impact of global economic policy uncertainty (EPU) on various investment strategies. The increasing EPU, driven by uncertain events such as the Covid-19 pandemic, trade war, and regional conflicts creates a more complex environment for investors. This paper reviews a series of academic papers exploring how the EPU affects traditional investment methods such as stocks bonds and mutual funds, as well as some new investment strategies environmental social and governance (ESG) investing. Findings indicate that the EPU increases stock market volatility and improves the risk premium for bonds. Mutual funds show reduced inflows and increased management activities during the period of high EPU. In contrast, ESG investment becomes more stable under the EPU. By comparing the different performances of different strategies across different markets, the review aims to provide investors with strategies to mitigate risk and maximize returns. The insights gained from the paper could help investors and policymakers find more powerful methods to withstand the challenges and promote the development of the social economy.

Keywords: Economic policy uncertainty, investment strategies, ESG investment, risk management.

1. Introduction

The increasing global economic policy uncertainty(EPU), is driven by the Covid-19 pandemic, regional conflicts, financial crises or trade wars between countries. These unpredictable events created an uncertain environment. At the same time, the uncertainty increases the complexity of investors' decisions due to the unique performance of different investment strategies. Understanding the impacts of EPU on various investment strategies will be meaningful for investors to make better choices in the complex environment.

Economic policy uncertainty refers to the lack of predictability of economic policy, which will have a significant influence on the financial market and investment decisions [1]. The EPU could divided into monetary, fiscal and regulatory policy uncertainty [2]. Baker, Bloom, and Davis developed the EPU index, a powerful tool to measure policy uncertainty by analysing the frequency of relevant terms in newspapers. This index has been a powerful instrument to study the effect of EPU.

Studies have shown that EPU has a profound effect on different investment strategies. For example, Dai et al. showed a positive relationship between EPU and stock market volatility, which

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means a higher EPU index increases the risk in the stock market [3]. Similarly, Nedumparambil & Bhandari demonstrated that there is a negative relationship between EPU and mutual fund inflow in India, which indicates that investors are more risk-averse and more cautious during the period of EPU [4]. These findings highlight the necessity for investors to consider the EPU when making an investment decision.

Moreover, the EPU has an unsymmetric effect on different investment strategies. Traditional investment methods such as stock or bond investment are more sensitive to the EPU, stock will be more volatility during the period of high EPU, while bonds will require more risk premia to compensate for the market uncertainty [1, 5]. Compared to some traditional investment strategies, environmental social governance (ESG) investment shows a better ability to mitigate risk during the period of EPU. Huang showed that ESG investment improves the firm’s ability to reduce the negative effect on EPU and enhance the firm’s stability during the EPU [6].

This literature review aims to synthesize existing research on the performance of various investment strategies under EPU. By reviewing a series of papers, this review tries to provide comprehensive methods for investors to alleviate market risk and maximise the portfolio return. This paper is structured as follows: section 2: What is global economy policy uncertainty? section 3: Investment strategies overview, section 4: Compare the research between different areas, section5: Finding and conclusion. Through the analysis, this paper aims to provide a more powerful tool for investors to reduce the negative effect of EPU and try to make a contribution of effective investment strategies in an increasingly uncertain global economy.

2. What is global economic policy uncertainty?

Economic policy uncertainty refers to the lack of predictability in the financial market and impacts the firm-level decision-making process [1]. Economic policy uncertainty is measured using different models to capture the frequency of related terms used in media or reports. To quantify the impact of EPU, Baker et al. use the Economic Policy Uncertainty index from the frequency of different policy terms in various newspapers, which provides a method to measure policy uncertainty and has been widely used in academic research [1]. Hassett and Metcalf point out that the uncertainty is mainly about monetary, fiscal, and regulatory policy uncertainty [2]. Monetary policy uncertainty is related to the national central bank, which could affect the interest rate or inflation target and affect the economy. Fiscal policy uncertainty is uncertainty about the government tax or budget deficit. Regulatory policy uncertainty is uncertainty about the future regulations that will affect the development of an industry or business.

The reason why we need to analyze the EPU is that the EPU plays an important role in shaping the global economy and financial market. Bloom states that a high level of EPU can reduce the investment of firms increase market volatility and limit the development of the economy [7]. Studies show that there is a negative relationship between the firm investment and EPU, it also reduces consumer spending and increases the factors of social instability [8].

Empirical evidence implies the significant impact of EPU on the economy. For example, the 2008 global financial crisis led to a large decline in investment at the firm level and a decline in consumer spending, which had a long negative effect on the global economy [1]. Similarly, Born et al. show that market confidence and investment decreased in Europe with Brexit [9]. Altig et al. also figured out how COVID-19 increase the uncertainty of global EPU and limits the development of worldwide economic activities [10].

The significance EPU cannot be overstated, as it wields considerable influence on the global economic landscape. Comprehending EPU is crucial for both investors and policymakers, as it can inform investors' expectations of financial market trends and guide policymakers in devising suitable strategies to mitigate market volatility. Moreover, EPU's impact on global market stability and

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investment strategies of firms and investors underscores its importance in shaping the economic environment. Consequently, ongoing research into EPU is essential to better understand and address the negative effects of increased policy uncertainty in an ever-evolving economic climate.

3. Investment strategy overview

Investment strategies are important for investors because through investment strategies, the investor can achieve a specific portfolio and achieve specific financial goals. Investment strategies include a series of methods such as traditional investment methods stock or bond investment, it also could invest in some new emerging areas such as considering the factor of environmental social and governance(ESG) investing. However, during the period of EPU, how the different strategies react to the EPU will be meaningful for investors because it helps the investor to make a choice between different strategies and achieve a higher level of expected return while reducing the impact of market volatility.

Stock market investments are when investors purchase shares of public companies. These could provide investors with a higher level of return but they also face a high level of market uncertainty and risk. Arouri et al. showed that the EPU significantly increases the volatility of the stock market, which means that EPU is an import ant factor that investors need to consider when they try to get profits from the stock market [11]. Similarly, Baker et al. state that in a firm with 50% government revenue, a 1% increase in policy uncertainty index will cause 0.11% stock market volatility [1]. Dai et al. also showed a positive relationship between EPU and the risk of the stock market, which means the increment of EPU will increase the uncertainty of the stock market [3].

Bonds are a kind of investment in which investors loan money to the government or corporations to get a fixed interest rate. Compared to the stock, the bond will offer lower risk but the expected return will be less compared to the stock. IOANNIDIS and KA showed that with the increase of EPU, the risk premia will increase which means the expected return should be higher to compensate for the risk of uncertainty [5].

A mutual fund is where many investors pool money in a diversified portfolio of securities. The professional manager handles the mix of investments to achieve a high level of return. Nedumparambil and Bhandari state that EPU negatively impacts the mutual fund inflows [4]. Their study on the Indian market revealed that investors in India rely more on naive measures rather than complex models to adjust the risk, and they are more cautious during the EPU period. This observation shows the importance of improving financial tools used in emerging markets to help the investor mitigate the EPU.

Although the financial return is an important factor that the investor needs to consider, environmental social governance (ESG) has come to receive more and more attention [12]. They consider the financial return alongside the environmental social governance factors which could help them to reduce the risk of uncertainty. Huang points out that companies with higher environmental social ESG performance are better able to mitigate the negative impact of EPU [6]. This indicates the investment with ESG consideration could enhance corporate stability during the EPU period. The increasing ESG consideration in investment reflects a trend towards sustainable and responsible investment which could help investors to reduce the uncertainty when a macroeconomic shock happens.

4. Compare research between different areas

This section aims to compare the reaction of different investment strategies under the EPU in different areas. The goal is to find some similarities or differences between different areas, which could provide us with more general methods about how to make better investment choices and reduce the negative impact of EPU.

From the long evidence of the United States, Arouri et al. showed that the increase of policy uncertainty reduces stock returns significantly and this effect will be more persistent during the extreme volatility periods [11]. The phenomenon is consistent with Baker et al. who analysed the frequency of articles in 10 leading US newspapers that contain some related terms to get the US EPU index and show that a high level of EPU will increase the volatility of the stock market [1]. More volatility will reduce the stock price due to the investor requiring a high-risk premium under the high level of uncertainty. In China, Chen et al. examined the impact of China's EPU on the expected return of the stock market [13]. They found higher EPU will lead to lower aggregate stock market return and the negative forecast relation is statistically significant. This research both states the significant role of EPU in stock market volatility. However, EUP does not affect a single economy. Li and Peng highlight the connection between two markets (the US and China), they state that EPU plays an important role in driving co-movements between two stock markets [14]. In the Japanese market, C. Chiang also found a negative relationship between EPU and stock returns [15]. However, they show that the stock market in Japan is asymmetry, compared to the US, which has a more significant negative effect when the EPU is negative compared to positive. At the same time, C. Chiang stated strong evidence of EPU spillovers from the US to the Japanese market [16]. However, spillovers from Japan to the US are small. All of these researches show that when a country faces a situation where EPU increases, the volatility in the stock market will increase, the uncertainty will increase and the investor's insecurity will increase due to the predictability and confidence in the stock market reduce.

Compared to the stock market, bonds are also a kind of traditional investment strategy. Fang et al. analysed the US market and concluded that when the EPU increases, the demand for the stock will decrease, but the demand for bonds will increase [17]. It can be demonstrated that there is a negative relationship between EPU and stock-market correlations, which is consistent with Li et al. and Chiang [15, 18]. Similarly, Jessica et al. analyzed the EPU on 10-year Spanish bond yield, they also found that there is a positive relationship between EPU and bond yield, which means when EPU increases, the bond yield and demand will increase [19]. Smales found the relationship between EPU and the Australian bond market is significant, the EPU will change Australian bond yield and excess stock returns [20]. The relationship is more concentrated on the left tail of return distribution which means it will cause negative returns or losses. The impact of EPU on markets also extends to the new emerging market, Kumar and Prateek Prasanna examined the role of domestic and foreign EPU in corporate bond yields in emerging Asian markets, they found the effect of domestic EPU will be higher than foreign EPU [21]. This implies that domestic policy uncertainty will have a more profound impact on bond yields in emerging markets. Overall, the general trend indicates that higher EPU will lead to increased bond yields as investors seek higher expected returns to offset the risk of higher levels of uncertainty, understanding these is crucial for investors because it could help investors to adjust investment strategies to maintain stable market returns.

The impact of EPU on mutual funds varies across the different markets. Chen et al. found that investors in the US market tend to increase their international investment diversification efforts to hedge against the EPU when the global EPU is low, but when the global EPU is high, the benefits of diversification will be reduced [22]. There is a positive relationship between EPU and the US mutual fund's weight of cross-listed stocks. On the other hand, in the Chinese market, Luo et al. analyzed the mutual fund data between 2006 and 2020 and concluded that there is a positive and statistically economically significant relationship between the EPU and the behaviour of managers' risk-shifting [23]. During the period of high EPU, mutual fund managers tend to increase their shifting activities and adjust their portfolios to manage risk more cautiously. This will give the owner of the asset a lower return but help in mitigate the potential losses during the EPU. Similarly, in the Indian mutual fund market, Nedumparambil and Bhandari showed that mutual fund flows are significantly influenced by the EPU, investors are more sensitive to economic news or policy changes so they will become more cautious and decrease their investment during the period of high EPU to keep high liquid of their wealth [4]. The investment behaviour of different areas varies. In China, mutual fund managers engage in risk-shifting during the high EPU to reduce risk, whereas in India, investors become cautious and make investments more carefully to mitigate the negative impact of EPU. However, US investors try to diversify internationally to hedge against the EPU.

Zhang et al. analyzed the data from BRICS nations and found that ESG score plays an important role in reducing the negative impact of EPU on corporate investment and firms with high scores of ESG not only better to develop in the future but also have better ability to withstand the challenges of EPU [24]. In the US, according to Friede et al. ESG investments have a strong performance during the period of high EPU, they show that firms with high ESG scores exhibit low volatility and better financial performance which is more attractive for investors [25]. Similarly, Alandejani and Al-Shaer showed that during the period of EPU, firms are more likely to engage in ESG activities, this could increase the firm’s ability to make profits and better deal with the EPU as they have more resources to facilitate the effective investment [26]. Across various markets, during the period of EPU, ESG investment tends to provide more stability. This is largely due to the long-term practices adopted by the firms with high ESG ratings, which give them a better ability to withstand the short-term uncertainty events. By analyzing the performance of ESG investment across areas, investors could better understand the importance of considering the ESG when they make investment decisions, and increase the ability to mitigate risk during the EPU.

5. Conclusion

In conclusion, global economic policy uncertainty significantly impacts the investor’s investment strategies. The stock market will increase volatility and exhibit increased risk. The bond market will increase demand and return to compensate for the high level of uncertainty. The mutual fund market will experience reduced inflows and increase the activities of adjusting risk profiles. Compared to these traditional investment strategies, ESG investment offers more stability and reliance. The different reactions of the market underscore the importance of combining the investment strategies with the local social environment, investors should not only consider traditional investment strategies but also incorporate different environment social environment factors. Understanding these different strategies is crucial for developing effective investment strategies and policy interventions that could mitigate risk and help investors capture opportunities to maximise their profits during the period of EPU. By continuing to study these effects and adapt to the change of EPU, investors could better understand the negative effects of EPU and adjust their investment strategies, policymakers could adjust the marco policy to help investors reduce the influence of EPU. This proactive method will be essential in maintaining financial stability and achieving economic growth.

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