Uluslararası İleri Doğa Bilimleri ve Mühendislik Araştırmaları Dergisi
Sayı 8, S. 460-463, 4, 2024

Araştırma Makalesi

International Journal of Advanced Natural Sciences and Engineering Researches
Volume 8, pp. 460-463, 4, 2024

Research Article

https://as-proceeding.com/index.php/ijanser
ISSN: 2980-0811

Role of Sentiment in Households' Financial Decision Making during the COVID-19 Pandemic: Survey from Empirical Research

Matej Boór[1*], Yuliya Petrenko[2]

[1]*Department of Finance, University of Economics in Bratislava, Slovak Republic*
[2] *Department of Finance, University of Economics in Bratislava, Slovak Republic*

*(matej.boor@euba.sk)

(Received:20 May 2024, Accepted:26 May 2024)

(3rd International Conference on Engineering, Natural and Social Sciences ICENSOS 2024, May 16-17, 2024)

ATIF/REFERENCE: Boór, M. & Petrenko, Y. (2024). Role of Sentiment in Households' Financial Decision Making during the COVID-19 Pandemic: Survey from Empirical Research. *International Journal of Advanced Natural Sciences and Engineering Researches*, 8(4), 460-463.

Abstract – This paper investigates the relationship between household sentiment and financial decision making during the COVID-19 pandemic. Although the COVID-19 pandemic has been overcome globally, the concept is very underdeveloped in the empirical literature. This paper therefore addresses this concern by attempting to highlight areas of contention in research in this sphere of household financial decision making. Based on several empirical studies dating back to the COVID-19 pandemic and organised chronologically, we come to formulate a number of areas that should be targeted to advance further research. These open areas include (a) the definition of sentiment, (b) the way sentiment is measured, (c) the distinction between professional investment decision making and household investment decision making, and (d) the distinction between consumer behaviour and household investment behaviour and (e) the lack of empirical studies addressing the impact of household sentiment on their financial decision making during the COVID-19 pandemic. Continued research in this area of finance is therefore also essential for understanding and learning for future potential pandemics.

Keywords – COVID-19, Financial Decision Making of Households, Household Sentiment, Investment, Investor Sentiment

I. Introduction

Household financial decision making has been the subject of academic, professional and public debate for several decades. Household financial decision making itself can essentially be understood as the choice of specific financial instruments in which households allocate their spare financial resources. In this case, both the time aspect and the reason for spending are important factors. In our case, the time aspect is medium to long term and households spend money in the present with the aim of capitalising it and receiving a benefit in the future. These factors therefore distinguish households' financial decision making from that of consumers, which tends to be short-term and aimed at satisfying immediate needs. In some situations, it is difficult to distinguish between a household's financial and consumption decisions (e.g. the purchase of a house) and the main difference is therefore the purpose of the purchase of a particular durable good or asset.

Household financial decisions are mainly driven by risk aversion, which is influenced by a number of factors. Sentiment is one of the most important factors influencing a household's financial decision, and sentiment itself can be influenced by several external factors (such as the pandemic associated with the spread of COVID-19).

In this paper, we analyse the previous research studies in chronological order to identify the main areas of contention related to the issue of households' sentiment and its impact on their financial decision making during the COVID-19 pandemic.

The paper proceeds as follows: Section II discusses the main area of concern, namely a review of the literature and empirical studies that specifically address with the role of sentiment in shaping financial decisions during the COVID-19 pandemic. The following Section III deals with the interpretation of our findings, which are then formulated into conclusions.

II. THE ROLE OF SENTIMENT IN THE FINANCIAL DECISION MAKING DURING THE COVID-19 PANDEMIC

The first and most important step in our research is to define the concept of household investor sentiment. Although sentiment is a global phenomenon and one of the most important factors influencing households' financial decisions, no official definition of it has ever been adopted. The academic community is not entirely unanimous on what the sentiment should include (Bormann, 2013). Within the concept of sentiment, we can include categories such as emotions and moods (Filiz, 2021; Kusev et al., 2017), predictions, outlooks and beliefs (Rakovska et al., 2020; Kamdar, 2019) or trust (Bialowolski, 2019). The reason why sentiment is specifically associated with emotions and moods is that these factors influence future expectations and shape risk aversion, which is the *de facto* essence of household financial decision making. Bormann (2013) further discusses the construction and use of sentiment indices. He also restates that any data can be included in sentiment indices if it is believed to reflect investor sentiment. He starts from the observation that there is no official definition of sentiment, and that sentiment indices can include any data. From this perspective, it is extremely difficult to subsequently assess and accurately define household sentiment.

In general, therefore, we are inclined to use the definition of Baker & Wurgler (2007), who define sentiment as "beliefs about future cash flows and investment risks that are not supported by available facts...", as it is quite broad and also offers flexibility for further research.

After characterising the concept of household sentiment, we move on to a review of the literature focusing on the link between household sentiment, household financial decision making, and the COVID-19 pandemic, which we present in chronological order based on the year of publication of each paper. Although it can be argued that the COVID-19 pandemic is now officially over, we know very little about its impact on the financial decision making of economic agents, not least households.

Yue, Korkmaz, and Zhou (2020) use the Survey and Research Center for China Household Finance to investigate the impact of COVID-19 on household financial decision making. Using statistical and econometric techniques (linear probability and probit models), they show that knowing someone who has COVID-19 leads to a loss of confidence in the economy. As a result, households changed their investment behaviour and became more risk-averse. The change in investment behaviour was also reflected in a lower amount allocated to investment.

Sun, Bao and Lu (2021) construct a household investor sentiment index based on coronavirus-related news (CRNs) and economic-related announcements (ERAs) and examine whether it affects the stock price of medical device companies. They substantiate their research by showing that the COVID-19 pandemic and the related household sentiment, based on the number of news reports about the spread of COVID-19, are positively correlated with the value of medical industry stocks. This research was conducted in China, Hong Kong, Korea, Japan and the US.

Dash & Maitra (2022) use daily data from the Google search engine volume index (GSVI) to capture the pandemic uncertainty and examine its impact on stock market activity (returns, volatility, and illiquidity) in major world economies, while controlling for the effect of the Financial and Economic Attitudes Revealed by Search (FEARS) sentiment index, whereby the GSVI index is a suitable indicator for capturing household sentiment (Da, Engelberg, & Gao, 2015). The results in the G7 countries suggest that the spread of COVID-19 has led to pessimistic sentiment in individual countries, with the greatest impact at the beginning of the pandemic in the period from January 2020 to March 2020.

Hasan (2022) created a new household sentiment index based on Google search volume (search terms: "coronavirus pandemic", "coronavirus epidemic", and "coronavirus outbreak") called the Scared COVID-19 Attitude Revealed by Eager Search (SCARES). The household sentiment index in question covered the period from the beginning of May 2020 to the end of July 2021 in the United States of America, and the data were based on a daily basis. This empirical study shows that an increase in household sentiment index has a negative impact on stock market returns.

Cevik, et al. (2022) used the Google Search Volume Index to search for terms related to the spread of COVID-19 or vaccines to prevent it. For this purpose, they used weekly data from 03/2020 to 04/2021 in a group of 20 countries. They demonstrated that there is a relationship between sentiment and stock market fluctuations and returns. Positive sentiment increases the returns of stocks and decreases their volatility. Conversely, when sentiment is negative, returns of stocks decreases and volatility increases. Thus, according to the authors, investor sentiment (and also household sentiment) becomes a suitable predictor of stock market behaviour during pandemics.

Yazdanparast & Alhenawi (2022) found with interesting results when examining the impact of the pandemic on the post-pandemic times, focusing on household consumption and investment decisions. Based on the results of a survey conducted in 4 countries (United States of America, United Kingdom, South Africa and Mexico), they showed that fear and negative emotions experienced during the pandemic negatively affect households' financial planning in the post-pandemic period due to the assumption of economic vulnerability.

Jia, Fan, and Xia (2022) examined the impact of COVID-19 on the allocation of funds to asset components by households in China, which was characterised by zero tolerance for COVID-19. They surveyed a sample of 721 households and asked them about their allocation of funds in three periods: before the pandemic, during the pandemic, and after the pandemic. The results show that the COVID-19 disease and related sentiment significantly affected households' financial asset allocation, with savings increasing. Uncertainty about economic and social issues led to a change in attitudes towards risk aversion.

Goel & Dash (2023) used the Google Internet search volumes index as a proxy for household sentiment to demonstrate changes in stock returns in the tourism industry, confirming the existence of an inversely proportional relationship. Thanks to government support, negative sentiment was slightly reduced and larger companies with better growth prospects also increased their stock returns.

III. RESULTS AND THE DISCUSSION

Based on the previous section, we can formulate a number of open questions related to the issues of household sentiment, household financial decision making and the COVID-19 pandemic. The main issue is precisely the definition of sentiment. As we have outlined above, there is no such precise definition of sentiment and each author focuses on a particular aspect that he or she considers to be the most important. Another open question arising from the lack of a unified concept of sentiment is how sentiment is measured. Several studies simply use questionnaires in which respondents express their subjective moods, feelings and expectations. Another possibility is to construct indices based, for example, on the evolution of macroeconomic indicators or, more recently, the very popular method of using analytical tools to search the Internet or social networks for a string of certain words that express households' expectations. The third area is the distinction between the investment behaviour of firms or professional investors and that of households, as there may be a difference here. A fourth area of controversy is the impact of sentiment on household financial behaviour during the COVID-19 pandemic. We find this area controversial because of the lack of empirical studies, even though the theoretical underpinnings are distinct. Many studies do not look at the impact of household sentiment on their financial decision making, but do look at the impact of household sentiment on the return, volatility, and stock price of different types of companies.

IV. CONCLUSION

The paper examines the relationship between household sentiment, household financial decision making and the COVID-19 pandemic. We identify the core literature and empirical studies that emerged specifically during the COVID-19 pandemic and that touch on our issue. As a result, our paper identifies the controversial points or issues that are related to the topic namely (a) the definition of sentiment, (b) the way sentiment is measured, (c) the distinction between professional investment decision making and financial decision making of households, and (d) the distinction between consumer behaviour and household investment behaviour, and (e) the paucity of empirical studies dealing with the impact of households' sentiment on their financial decision making during the COVID-19 pandemic. In conclusion, we suggest that although the COVID-19 pandemic is over, its impact has not been sufficiently explored in the scientific and academic literature.

ACKNOWLEDGMENT

This paper was prepared within the framework of the Young Scientists Project No. I-24-108-00 entitled *The Role of Sentiment in Household Financial Decision Making during the COVID-19 Pandemic in the Slovak Republic*.

REFERENCES

[1] Baker, M., Wurgler, J. (2007). Investor Sentiment in the Stock Market. *Journal of Economic Perspectives, 21 (2): 129-152.*

[2] Bialowolski, P. (2019). Economic sentiment as a driver for household financial behaviour. *Journal of Behavioral and Experimental Economics*, vol. 80, pp. 59-66.

[3] Bormann, S.-K. (2013). Sentiment Indices on Financial Markets: What Do they Measure? *Economics Discussion Papers, Kiel Institute for the World Economy*, 2013-58. urlhttp://www.economics-ejournal.org/economics/discussionpapers/2013-58. Discussion Paper.

[4] Cevik, E., Kirci Altinkeski, B., Cevik, E.I. et al. (2022) Investor sentiments and stock markets during the COVID-19 pandemic. *Financ Innov* 8, 69. https://doi.org/10.1186/s40854-022-00375-0

[5] Dash, S.R., Maitra, D. (2022) The COVID-19 pandemic uncertainty, investor sentiment, and global equity markets: Evidence from the time-frequency co-movements. *The North American Journal of Economics and Finance,* Elsevier, vol. 62(C).

[6] Da, Z., Engelberg, J., Gao, P. (2015). The sum of all FEARS investor sentiment and asset prices. The Review of Financial Studies, 28(1), 1–32.

[7] Filiz, I., 2021. Emotions and Exposure to Risk: The Influence of Positive and Negative Emotions on Portfolio Decisions. *Journal of Finance and Investment Analysis*, vol. 10, no. 1, pp. 25-62.

[8] Goel, Dash, S.R. (2023) Household pandemic Internet search intensity and stock returns: A case of tourism industry resiliency, IIMB Management Review, 35(4), pp. 426-440. ISSN 0970-3896, https://doi.org/10.1016/j.iimb.2023.09.003.

[9] Hasan, Md.T. (2022). The sum of all SCARES COVID-19 sentiment and asset return. *The Quarterly Review of Economics and Finance*, Elsevier, vol. 86(C), pages 332-346.

[10] Jia, H., Fan, S., Xia, M. (2022) Impact of the COVID-19 pandemic on household financial asset allocation: A China population study. *Front. Psychol.* 13:990610. doi: 10.3389/fpsyg.2022.990610

[11] KAMDAR, R. (2019) The Inattentive Consumer: Sentiment and Expectations. Meeting Papers 647, Society for Economic Dynamics.

[12] Kusev, P., H. Purser, R. Heilman, A. J. Cooke, P. Van Schaik, V. Baranova, R. Martin, P. Ayton (2017) Understanding Risky Behavior: The Influence of Cognitive, Emotional and Hormonal Factors on Decision-Making under Risk. *Front. Psychol*., 8:102.

[13] Rakovská, Z., Ehrenbergerová, D., Hodula, M. (2020) *The Power of Sentiment: Irrational Beliefs of Households and Consumer Loan Dynamics.* Czech National Bank. Working Paper Series No. 10/2020.

[14] Sun, Y., Bao, Q., Lu, Z., (2021) Coronavirus (Covid-19) outbreak, investor sentiment, and medical portfolio: Evidence from China, Hong Kong, Korea, Japan, and U.S. *Pacific-Basin Finance Journal*, Elsevier, vol. 65(C).

[15] Yazdanparast, A., Alhenawi, Y. (2022) Impact of COVID-19 pandemic on household financial decisions: A consumer vulnerability perspective. Journal of Consumer Behaviour, 21(4), 806–827. https://doi.org/10.1002/cb.2038

[16] Yue, P., Korkmaz, A.Z., Zhou, H. (2020) Household Financial Decision Making Amidst the COVID-19 Pandemic. *Emerging Markets Finance and Trade,* 56(10), 2363–77. doi:10.1080/1540496X.2020.1784717.