Journal of Financial Management Strategy
Alzahra University
Vol. 12, No. 45, Summer 2024

pp. 13-14

Research Paper

Time-Varying Effect of Macroeconomic Factors on Investor Sentiment: Examining the Role of Sanction, JCPOA and Covid-19[1]

Manije Ramshe[2], Esmaeel Jalili[3], Mohaddese Yousefi[4]

Received: 2023/09/12 Accepted: 2023/11/18

INTRODUCTION

Investor sentiment plays an important role in financial markets, making it crucial to study the factors affecting it. Investor sentiment is a psychological belief about future cash flows with excessive optimism (high sentiment) or pessimism (low sentiment), which can lead to a wrong assessment of the value of assets, causing the stock price to deviate from its fundamental value. High (low) sentiments of capital investors are formed by good (bad) news related to economic conditions or companies and will lead to overvaluation (undervaluation) of the company (Kim and Na, 2018). According to Chen et al. (2021), investor sentiment varies across economic cycles and can affect both financial markets and the real sector of the economy. Many studies have examined the effect of emotion on financial markets and the real sector of the economy. The existing literature often considers investor sentiment as an exogenous variable, focusing less on how it is determined. Considering the importance of macroeconomic factors in explaining investor sentiment, the present study examines the time-varying effect of these factors on investor sentiment in the Tehran Stock Exchange. For this purpose, the structural vector autoregression approach with time-varying parameters and stochastic volatility (TVP-SVAR-SV) has been used. This approach investigates the effect of shocks from each macroeconomic factor on investor sentiment in the short, medium, and long term. The use of this approach also allows for the study of the dynamic relationship between variables at specific time points. This research selected three events: the sanctions in 2012, the Joint Comprehensive Plan of Action (JCPOA), and the coexistence of COVID-19 and America's withdrawal from the JCPOA.

---

1. 10.22051/JFM.2023.44964.2863

2. Assistant Professor, Department of Accounting, Faculty of Economics and Administrative Sciences, University of Qom, Qom, Iran. Corresponding Author. Email:m.ramshe@qom.ac.ir.

3. Ph.D. Department of Strategic Management, Faculty of Management and Economics, Tarbiat Modares University, Tehran, Iran. Email:e.jalili@modares.ac.ir.

4. M.Sc. Department of Accounting, Faculty of Economics and Administrative Sciences, Qom University, Qom, Iran. Email:mohaddese.u72@gmail.com.

MATERIALS AND METHODS

The current research examines the time-varying effect of macroeconomic factors on investor sentiment using the TVP-SVAR-SV approach. The data was collected quarterly from the first quarter of 2004 to the third quarter of 2022. Ox Metrics software was used to estimate the models. Macroeconomic variables used in this research include the exchange rate (Ex), OPEC oil price (OIL), liquidity (LIQ), gross domestic product (GDP), and inflation (INF). In this paper, the combined index of Psychological Line Index, High and Low Index, Relative Strength Index, and Adjusted Turnover Rate was used to measure the investor sentiment index. Then, using the method of principal component analysis, the indices were combined to obtain a single index.

RESULTS AND DISCUSSION

The findings showed that the impact of shocks from macroeconomic factors on investor sentiment was negative in the short term. After the second quarter of 2014, the exchange rate had a positive effect on investor sentiment in the medium term. GDP and inflation also had a positive effect on investor sentiment in the medium term, with the biggest reaction related to the drop in oil prices in 2008. Compared to other factors, liquidity had the greatest impact on investor sentiment in the short, medium, and long term. The study of sentiment reaction to shocks from macroeconomic factors during the three events—sanctions in 2012, the JCPOA, and the coexistence of COVID-19 and the withdrawal of the United States from the JCPOA—shows that the sentiment response to shocks from each of the factors in all three events is similar, and no factor has a lasting positive or negative effect on sentiment. The effect period of exchange rate and oil price shocks on investor sentiment is shorter than that of other macroeconomic variables. In the first (third) event, compared to the other two events, the sentiment reaction to shocks from macroeconomic variables (except inflation) is stronger (weaker).

CONCLUSION

Macroeconomic factors are usually expected to affect the sentiment of economic agents with a delay. Therefore, it is expected that the investor's reaction to shocks from these factors will be different in the short, medium, and long term. The findings of this paper confirm the varying reaction of investor sentiment to shocks from these macroeconomic factors in the short, medium, and long term, indicating the limited effect of these factors on investor sentiment in the long term. On the other hand, the strong effect of investor sentiment on itself in the short term (compared to the short-term effect of macroeconomic factors) shows that investor sentiment is influenced more by the prevailing sentiment in the stock market in the previous quarter than by macroeconomic factors. Therefore, policymakers and relevant institutions should pay attention to this issue and provide suitable conditions for increasing the level of awareness and knowledge among capital market participants. It is suggested to study the behavior of investor sentiment in response to shocks from other fundamental concepts such as specific characteristics of companies and industries in future research.

Keywords: Macroeconomic Factors, Investor Sentiment, Sanction, Covid-19, TVP-SVAR-SV.

JEL Classification: E70, G40, C58, F51.