Journal of Financial Management Strategy
Alzahra University
Vol. 10, No. 39, Winter 2022

pp. 5-6

Research Paper

Investigating Iran's Financial Markets Influenceability on the Global Economy Using Continuous Wavelet Transform[1]

Parvin Hosseininia[2], Shahram Fattahi[3], Kiomars Soheili[4]

Received: 2021/11/03 Accepted: 2023/01/09

Introduction

Economic stability includes conditions such as low inflation, full employment, and balance of payments as a composed feature, whichever are the main goals of government interventions and policies (Komijani, 1374). One of the types of markets is Financial-market providing financial resources for the real activities of the economy (Fattahi et al, 2012). One of the components of financial markets is the security market. The securities market in most countries constitutes the core of the capital market providing the necessary conditions for economic prosperity by pricing, capital resource mobilization, optimal allocation of resources, and reducing risk (Pakdin Amir et al, 2009). In addition, Gold is considered a safe capital for investors and even central banks at critical times and in the inflation situation, and finally, the Exchange rate as one of the macroeconomic factors has always been put under consideration by the financial and economic community and reflects the economic conditions. (Ghasemi et al, 1399).

The present study tries to examine the relationship between global economic activities (by using the Killian index), Uncertainty of global economic policies, and the financial markets of Iran in two areas of time and frequency which it will be done by using the Wavelet analysis method of dynamic simultaneous changes between the studied variables at different frequencies and different periods.

Materials and Methods

The present study tries to examine the relationship between global economic activities (by using the Killian index), Uncertainty of global economic policies, and the

1. DOI: 10.22051/JFM.2023.38377.2613
2. M.Sc. Department of Economics, Faculty of Social Sciences, Razi University; Email:p.hosseini07@gmail.com.
3. Associate Professor, Department of Economics, Faculty of Social Sciences, Razi University Corresponding Author. Emial:sfattahi@razi.ac.ir.
4. Associate Professor, Department of Economics, Faculty of Social Sciences, Razi University; Email:qsoheily@yahoo.com.

financial markets of Iran in two areas of time and frequency using the Wavelet analysis method of dynamic simultaneous changes between the studied variables at different frequencies and different periods.

Results and Discussion

The wavelet coherency is then a value within the range of [0,1] in a time-frequency window. Particularly, a coherency of zero indicates no co-movement between the two series, and stronger coherency suggests stronger co-movement between the two series.

The highest correlation between the Kilian index and the stock market is in high and medium frequencies in which the fluctuations of the Kilian index have had significant effects on stock market fluctuations. The strongest correlation between the Killian index and the currency market is in the period 2007-2010. Also, since 2010 the effect of fluctuations of the Killian index on the exchange rate has been limited. There is a correlation between the Kilian index and gold coin prices in high and medium frequencies. And the fluctuations of the Kilian index on gold coin price were removed in the long term and all periods of the sample too. The main correlation between Economic policy and the stock market has occurred in the medium and long term. Moreover, the main correlation between the Economic policy uncertainty index and the currency market occurred in the middle frequencies and the period of 2006-2009. The highest correlation occurred between the Economic policy uncertainty index and gold coin price at high frequencies. There is a correlation between gold coin prices and the stock market in the short term, but it has increased significantly over an increasing period. There is also a correlation between gold coin price and the currency market, and between the stock market and currency market at different frequencies.

Conclusion

The results of the present study show that the correlation between the Killian index and financial markets has been mainly in the middle or low frequencies. It was also found that there is a correlation between the Economic policy uncertainty index and stock and Currency markets at low frequencies, but concerning the Economic policy uncertainty index and gold coin market, this correlation has occurred at high frequencies. The correlation has occurred between financial markets, including gold coin and Stock markets in the high and medium frequencies, and the Stock market and Currency market, gold coin market, and Currency market at all frequencies, which means occurred in all periods of the sample. Given the correlation between the pairs of variables, it is suggested that investors should not use a certain policy for different periods to earn maximum profit.

Keywords: Kilian Index; Economic Policy Uncertainty; Iranian Financial Markets; Wavelet Correlation.

JEL Classification: C01, F00, G10.