

STOCK MARKET FLUCTUATIONS AND MACROECONOMIC VARIABLES

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Abstract

The importance of the role of capital markets in resource allocation, evaluation of investment projects and the market boom is completely undeniable. An efficient capital market can cause to allocate resources and direction of desirable capital, investment in the economy and led to the flourishing of the economy. Issue of examining the impact of macroeconomic variables on stock markets is a topic of interest to academics and investors. In general, it is believed that stock prices are determined by some macroeconomic variables such as inflation, exchange rates, gross domestic product and liquidity.

Keywords: Inflation, Exchange Rates, Gross Domestic Product, Liquidity

1. Introduction

The importance of the role of capital markets in resource allocation, evaluation of investment projects and the market boom is completely undeniable. An efficient capital market can cause to allocate resources and direction of desirable capital, investment in the economy and led to the flourishing of the economy (Sajadi & et al, 2010).

Stock exchange is official market of buying and selling shares of companies under the terms of special rules. One of the tasks this market is help to the fair price of securities and speed up transactions. On the one hand, the stock exchange is center of collecting savings and liquidity of the private sector to finance long-term investment projects. This market is one of the most important markets of economy that its index market is influenced by several factors. The most important of these factors are macroeconomic variables (Karimzasdeh & et al, 2013).

Investing in the stock constitute an important part of the economy of the whole country and undoubtedly the greatest amount of capital will exchange through stock markets around the world and the national economy heavily influenced by the performance of the stock market. It is also market for professional investors and for public as an investment tool available (Samadi & Bayani, 2011). Stock returns is affected by the returns of asset types, changes in economic and political conditions, behavior reaction of a wider range of decision makers, the risk , many known and unknown factors (Jafari, 2010). The stock market as the center to gather savings and liquidity of private-sector is considered important element of financial markets. Currently, the issue of examining the impact of macroeconomic variables on stock markets is a topic of interest to academics and investors. In general, it is believed that stock prices are determined by some macroeconomic variables such as inflation, exchange rates, gross domestic product and liquidity (Sajadi & et al, 2010).

2. The Impact of Stock Exchange in Economic Growth

Stock exchange is components of the financial market and the most important institutions of capital market that has important role in mobilization of savings resources and needed to finance production units. Due to the fact that investment is one of the essential cases in the economic growth of each country (Namazi & Shooshtarian, 1996) and is one of the most important factors of development in the present century, it can be concluded that stock exchange is part of the economy which is also associated with other sectors of the economy and can have an important role in the economic development of a country (Gilaninia & et al, 2012). Stock price index and returns it has always influenced by economic variables and boom and recession of the stock exchange is strongly influenced by fluctuations in these variables. Tehran Stock Exchange is known as the most important institution of Iran capital market, with an antiquity of about 4 decades, for various reasons have always been faced with frequent fluctuations and has experienced different periods of boom and bust. Therefore, understanding the characteristics of this market and removing its difficulties, has particular importance and requires effort and extensive research (Reza Gholizadeh & et al, 2013).

According to the classical theory of economics, if sectors of economic efficiency spread, they will be able to attract additional production factors from non-efficient sectors. To achieve efficiency in the community should be recognized companies and projects of efficient and profitable from non-profitable companies and projects. With an efficient mechanism in the capital market easily can be done it. In an economy with capital markets function properly, on the one hand increases the volume of investments on the other hand increases the quality and safety of investments (Gilaninia & et al, 2011). In such a framework also provides the possibility of economic growth. Some economic analysts believe that the stock market and the stock exchange don't have a positive effect on economic growth in developing countries. But the evidence and recent studies have shown that securities market can have a profound impact on economic growth and development. These markets by collecting of liquidity, in addition to short-term financing for needed units provide long-term investment to profitable investment (Moshrefi, 2005).

Stock markets through diversification in the portfolio of companies support investors against the inherent unsystematic risks. Diversify risk increase investment in long-term projects with greater efficiency and increasing rates of economic growth. So without stock markets may be removed investment funds from long-term investment projects and is lead to reduce economic growth. Because ability to portfolio, firms to take a share of the market turn to differentiate and diversify in produced goods. This phenomenon causes the specialization of production, in this way increase enterprise efficiency and will improve the phenomenon of specialization in the economy (Fakhr Hosseini & Shahabi, 2007).

Political instability has a negative impact on stock market development and economic growth. Stock markets by providing regular information about their companies boost economic growth. Right dissemination and easy of effective information on prices and dividends of listed companies will raise the level of research and development which in turn boosts economic growth. Greenwood and Smith argue that capital market reduces the cost of moving savings and provides investment opportunities with the best technology. Bsflld believes that international stock risk due to the integration of capital markets will improve resource allocation and promote economic growth. Stiglitz states that capital market can improve asymmetric information and the

reason is that the rate of change is the high price. Kant & Levin noted that for some reason reducing the stock market liquidity by reducing savings may reduce economic growth:

The first is that capital market may reduce savings rate due to substitution and income effects.

Second, by reducing assurance associated with investment is possible that extra liquidity of the stock market affect rates of savings.

Third, it is possible that stock market liquidity encourages close investment to investment and reduces economic growth. Greater market liquidity may lead to that investors will delay in selling shares. Greater market liquidity may cause that poor investment assign their shares and reduce investment and increase control by managers and owners of firms (Fakhr Hoseini & Shahabi, 2007).

3. Relationship between Stock Prices and Macroeconomic Variables

3.1. The Impact of Inflation on Stock Price Index

Inflation has long been considered as one of the most important economic variables affecting the stock price. Relationship between inflation and stock returns is controversial topics among researchers. Balance doesn't arise in the market based on nominal values and investors consider inflation as one of the most important macroeconomic variables affecting the decision for an investment. It states that the actual return of a share is equal to the difference between stock returns based on share value of inflation in the period of investment. If inflation be well predictable, simply investors add percent as inflation to their expected return and the market reach equilibrium state. In terms of inflation on average increases nominal interest of companies after a period of time, In fact, profitability has not increased, but nominal interest has increased by inflation. The nominal stock prices will also increase when nominal interest rises. So the rise in inflation will increase dividend profit and therefore stock returns index. Hence there is a positive relationship between rising inflation rate and return index of total stock (Samadi & Bayani, 2011). Another effect of inflation is that reduce intrinsic value of per share. In the years when inflation is high thus reduces quality of real benefit in companies (economic profit). Moreover, the terms of inflation reduces the purchasing power of the people. Rising the cost of living in such a way would be that investment opportunities and savings taken from them and income will be spent more current costs. On the other hand, the decline in investment led to reduce demand for investment in stock exchange and thus decline the stock index. Fama in his study concluded that stock returns have negative and simple correlation with inflation. The relationship between inflation rate and future growth rate of real economic activity is negative. Stock prices positively influenced future growth rate of real economic activities. Therefore, considering the positive correlation between stock prices and real economic activity that is caused by the real sector of the economy, existence of a negative correlation between inflation and real economic activity resulting from the monetary sector and also a direct relationship between stock returns and stock prices at constant EPS, conclude existence a negative correlation between stock returns and inflation. It should be noted that rising inflation leads to increase the amount of future cash flows. As a result, it can be said that at least in the short term, part of the impact resulting from the discount rate is compensated by increasing the amount of future cash flows. In terms of inflation on average nominal profit of the company is more after a period of time. In fact, profitability doesn't have increased; but also increased nominal interest and due to increase inflation is also nominal interest. Shares nominal price increases when nominal profit rises. In fact, in years when inflation rate is high, the quality of the actual benefit in companies

will reduce. When we separated profits from inflation of profit, then quality of economic benefit will be determined. In studies that have been done in Tehran Stock Exchange, the relationship between stock price of Tehran Stock Exchange and inflation is positive and very strong. The most important effect of inflation is reducing the desire to invest; because savings is low in terms of Inflation. In terms of inflation decreases the purchasing power of people and an increase in the cost of living is such that isn't opportunity for savings. Reduction of savings is lead to reduce investment and activities of stock exchange and thus to reduce the stock returns. In general, high inflation rate causes the adverse effects of the economy, including the increase in banking facilities and in financing costs. This issue is also reduced return on investments (Pourheidari & Pahlevan, 2008).

3.2. The Impact of GDP on Stock Price Index

GDP¹ is a measure to assess the economic activities. It is the most comprehensive variable that shows performance of the real sector of economy. Order of the GDP is the value of sum of final goods and services produced is produced by an economic system in a specified time period such as a year. Order of the final goods and services is goods and services that are in the last stage of the supply chain and buyers do not buy for use in the production of other goods and services (for supply in the market). In contrast, the concept of final goods is intermediate goods that are used to produce goods and services (Tabibian, 2000).

Udegbumam and Eriki in their research in Nigeria with Title "Inflation and Stock Price Behavior: Evidence from Nigerian Stock Market" concluded that changes in stock prices significantly is result of changes of the GDP and M1. Their research period was 1997 – 1980. El Chami (Quoted from Thanaiwong Kirativanich) evaluated the correlation between the economy and the stock market in Germany. Result of his study showed that there is a significant positive correlation between German stock market and real economic activity that its measure is GDP. Fama (Quoted from Thanaiwong Kirativanich) in their study understand existence a strong relationship between real economic activity and stock returns. Kirativanich in his study examines the macroeconomic variables on stock returns of companies in four Asian countries (Indonesia, Malaysia, Philippines and Thailand), concludes that macroeconomic variables (including GDP) affect stock market returns of Indonesia. Her conclusion, of course, about three Malaysia, Philippines and Thailand is not so (pourheidari & pahlevan, 2008).

3.3. The Impact of Liquidity on the Stock Price Index

There are different opinions about relationship between liquidity and stock prices. The quantity of money as a macroeconomic variable can be have considerable effects on interest rates in the money market and the general level of prices, but since the interest rate actually does not exist in Iran and the interest rate is determined by the Central Bank, can be considered changes in the price level. For example, an increase in the quantity of money leads to an increase in the general level of prices in the market. In addition, if the increase in quantity of money be the result of the state budget deficit, thus can have a negative effect on stock prices. As a result, the variable of money quantity can have a positive or negative impact on changes of price index. In Iran rising quantity of money and liquidity in the view of many economists has negative effects on the psychological aspects in the stock market (Eslamiun & Zare, 2006). According to monetary theory of inflation, rising liquidity continued at a rate more than multiplication of the growth rate

¹ Gross domestic product

of real income and income elasticity of demand for money is a necessary and sufficient condition for sustained inflation. On the other hand, some believe that rising liquidity can increase demand for investments and such as stocks. Thus, the relationship between liquidity and indicators should be positive. This hypothesis can be raised when liquidity growth develop activities of investment and production. Given that in Iran economic infrastructure to attract investment in the manufacturing sector is not sufficient and appropriate and liquidity rather than spend in production, be spend in speculative activities, so mainly rising liquidity will be led to increase demand and current costs. Because the research done in the field of monetary theory of inflation in Iran has shown that increasing liquidity in the community will not be along with increasing in GDP and is considered aggravating factors of inflation. It seems that the relationship between the rate of liquidity growth and stocks market indices is a negative relationship (Sajadi & et al, 2007).

3.4. The Impact of Exchange Rate on Stock Price Index

Exchange rate in developing countries is considered one of the economic factors influencing. According to the companies and institutions in these countries mainly provide their needs as imports from developed countries, therefore, changes in exchange rates is considered as one of the major factors influencing the exchange and clearing debt. Increase the exchange rate on the one hand increases the amount of external debt and on the other hand increases the cost of imported products and services provided by these companies. Whereas, rising corporate debt is led to lack of liquidity and lack of liquidity in economic enterprises has a negative effect on the distribution of profits, stock returns and cost index and also increase the cost of products, decline of company profit margins, decline price and stock returns and reduction of stock index (Sajadi & et al, 2007).

According to the economic theory there are bilateral relations between stock prices and exchange rates. The impact of exchange rates changes on stock prices can be examined both traditional approach and portfolio approach. Stock prices in turn affect the exchange rate (affected by the currency market from the stock market). Changes in exchange rates can have two different effects on stock prices. On the one hand, increase the exchange rate (in term of demand dimension) is lead to increasing income of exporting companies and therefore increasing their stock prices and on the other hand (in term of supply dimension) is leads to a decrease in import corporate profits, intermediate inputs and declining stock price of them (Abonoori, 2006). Stock prices decreases by the present value of future cash flows. For this reason, the exchange rate directly affects stocks prices. Finally, there is relationship between the exchange rates to stock prices.

4. Discussion and Conclusion

In this study investigate importance and status of capital markets, economic stability, economic crisis, impact of stock exchange in economic growth that most empirical studies have confirmed the positive correlation between stock markets and economic growth. In fact, stock market activities led to the positive and negative effects but the consequences of positive effects is more than negative effects. it investigate about the traditional and modern methods of analysis in the stock exchange price, theories related to stock prices, the relationship between macroeconomic variables such as GDP, inflation, exchange rate and volume of money on stock price index.

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