The World Financial Crises Effects on the Stock Index of Stock Exchange Corporation

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Abstract

The investors of the accepted corporation stocks, regarding the investment risks, are looking for more efficiency, due to this fact investigating the world financial effect is very prominent because at the time of investment predicting the investment future is the most essential concern of the shareholders. Theoretically, this goal is achieved through the fundamental analyses or drawing the stock efficiency diagram and it is based on the belief that "the future follows past experience pattern". Generally ,the investigation results show that the financial crises is transmitted as a domino to all the countries and international stocks markets and this phenomenon has affected our country through the oil incomes, B risks and the crises index ,itself. In other words, financial crises decrease the investment trust, increase the investment risks and decrease the stock efficiency in Iran investment markets.

Keywords: World financial crises, Stock index, Stock efficiency

Introduction

For a long time, the economy speculates that all the contributing groups in a stock corporation, work for a common goal. But during the 30 last years, so many issues emerge about the interest contradictions among the groups and how would these groups deal with this contradiction. This stock corporation grow and development cause the emergence and increasing a race of investors who aren't contributed directly in the co management, leading and supervising the co affairs through a board of executives. One of the most essential criteria for the stock decision making is the stock efficiency. The stock efficiency has informative content by itself and it is applied by most of the potential investors for the financial analysis and predictions. Thus, considering the effective variables on the efficiency of the stock exchange corporation is prominent. This goal is achieved through the fundamental analyses or drawing the stock diagram and it is based on the belief that "the future follows past experience pattern". Generally ,the investigation results show that the financial crises is transmitted as a domino to all the countries and international stocks markets and this phenomenon has affected our country through the oil incomes, B risks and the crises index

,itself. For achieving the first, maybe the time and knowledge needs can nullified them and the second is the need for knowledge and business information, this one can be occurred during an event that is not following the past course. The necessity to know the effective factors on Iran exchange co is crucial for the market active dealers.

Stock exchange co has a considerable stand in free economy and it is a symbol of market development in each country. The stock exchange focuses on the mass of investors with little save and plenty of producers who needs the investment.

The people invest in the stock exchange only when they can get acceptable information about the efficiency and this efficiency is comparable to the other investment opportunity. Based on this fact, we consider in organizational and intra organizational effects on the stock efficiency index of stock exchange co. considering the world financial crises effects on the stock efficiency index, is one of the most important variables. This article commence with investigation about the subject and the investigation background, then provides some outcomes patterns and it finally analyze the results.

Literature and investigation background
Contribution of the financial crises to the international market
Negativity of the bank accounts like Lehman brothers ,who bought a lot of mortgage house, cause the investors to ask for their savings. Most of the investors were banks and financial foundations whose failure to get their debts lead to the negativity of their accounts rate.
 Finally the continuing deflation of the share markets in the United States,
 Europe, and Asia, caused central banks leaders to choose the policy of concordant decrease of the interest rates. Although, this measure decreased the intensity of the share markets deflation, but the emerging of a new economic deflation, made it almost impossible to stabilize the financial and credit parts. Only two days after the chairman of the Federal Reserve announcing that there should not be expectations of a quick turn over in the economic circumstances, the index of Dow Jones share market fell 733 units.

It is therefore clear that the continuing of the expansive monetary policies by decreasing the rates of interest is the late economical crisis point, and the close ties of the international monetary and financial markets, is the reason for the transfer global economic crisis (Farzinvash, 2010).

Economic Crisis and its Types
The economic crisis is a sudden and quick change in the entire or the majority of the financial indices that includes short term interest rates and the price of the assets as paper money, shares, properties, lands, etc., bankruptcy, and the fall of the financial institutions. Creating price bulbs in one asset or a range of assets, is natural and usual in the market of the assets. The danger starts when the bulb goes from one asset to the other and transfers from one country to another and stops the economic structure. As the rise or bulb is recognized by the attack of money to the private or financial assets, that is expectation of the continuous increase in the prices of the assets, the financial crisis is identified through the sudden outgoing of the assets from the financial part to the monetary part. This behavior, in the contrary to the first conditions, reveals that the prices of the assets may face a deflation. Between the periods of rise and crisis, there may be periods of uncertainty and pressure. The uncertainty may last for a short time or be sporadic, and it may never lead to a crisis. The matter of a transforming of a uncertainty to a crisis is dependent on several factors. Fragility of the credits and facilities that are provided by banks, the pace of the inversion of the

expectations, the fall of the public trust by an occurrence (like a huge lose of a financial institution or even an interview of one of politicians) and finally the assurance of the society that the in crisis institution will be saved by the final loan givers, are all considered among effective factors in emergence if a crisis in a society. If the rule of the government parts on the financial and asset markets or imposing official controlling on the performance of banks and financial institutions (a phenomenon that is known as financial suppression) the relationship between the government and banks may intensify the danger of the crisis that is resulted by the accumulation of the backlog debts and it also may increase the nonconformity of currencies. In this condition that usually forces the governments and banks to support the specific parts or the institutions and companies, any unsuccessful performance of the related part or company, is reflected in the form of accumulated lost in the balance sheet of the banks and it threats the financial stability (Mohamadzade, 2001).

Theoretical pattern of the Economic Crisis

The crisis of a common currency, is a sort of speculation attack to the currency of a country (like the ''a'') that has its roots in the economic factors that are trying to transform their treasure of assets through buying the currency of that country. The phenomena can occur for different reasons that the investors feel the fear by: the government provision of its significant shortages through the inflationary taxing (or printing more bank notes); or it tries to reduce its un-indexed debts (the debts which are not rated in other currencies or in compare to the inflection) by decreasing the value of the common currency of the country. The standard framework of the Fleming, Mondel for the international issues, is not capable of describing the crisis of the common currencies. In his framework, with the complete movement of the assets, when the central bank decreases the rates of the interest under a regimen of the fixed rates of currency, the assets exit; and when the central bank increase the rates of the interest under a regimen of the fixed rates of currency, the assets flows into the country. And the efforts of the monetary officials for changing the rates of the interest through working with the private parts may become null as a result. Through a dynamic regimen of the currency rates, a central bank would not interfere the currency market and the whole excess or the shortage of the payment indices, should be provided by the outgoing and incoming of the assets accordingly. The need of the pathology and treatment of an economic crisis is the reason for emergence of models that included the financial shortage, expectations, and financial markets in spite of the equal power of buying. These models can be categorized in three generations. Each of these generations reflects especial points about the monetary crises (Abbigail and Owyang(2002).

The First Generation Patterns:

The patterns of the first generation are developed by Krugman(1979), Flood, and Garber(1984); these patterns were common up to the late 1990s, considered the financial expansion, credits breadth, Monetizing the shortage of the budget, and decreasing or finishing of the currency reserves, as the reasons for the dealers to speculative attack to the national currency of a country (with a fixed rate or unique currency). In fact, these patterns caused the crisis of the government shortage of budget and the internal breadth of the credits as their forecasting instruments. In this pattern, government uses the currency reserve for stabilization of the rate of currency and when the reserve of the currency reaches a critical low level, the speculative attack of the dealers to the national currency begins and the crisis happens.

The Second Generation Patterns

The second generation patterns that are developed by Obsfeld (1994), Eichengreen, Rose, and Wyhplosz (1996), were successful in describing the Self-fullfiling Contgious Currency Crises. A complementary scenario that is described in these models, include decreasing of the value of the common currency of a country; that this may be influencing the level of the prices (and the demand for the money as well) or the checking account by decreasing the exports to the neighboring countries and in each of the above mentioned cases, it would be probable for the currency of the neighboring country to increase in value. The flow of the crisis from one country to another also can be explained via different scenarios. First, an economic occurrence (such as war or an oil shock) that is communal for a geographical area or a group, can affect all those economies at the same time. In addition, an especial shock through the commercial ties can transfer from one country to another (Naderi, 2007).

In these patterns, the foundation of a large economy and the relative policies of the country about wages, prices, and the way that they are trying to stabilize the rate of currency, are the influencing factors in happening and emerging of the crisis. In second pattern in fact, the relative policy of the government in stabilizing the rate of the currency, is less seen mechanical in compare to the first generation pattern. In this pattern the government selects to defend or not about the fixed rate of the currency via the interaction between the degree of long term credit and the flexibility in the short term policies of the large economy. Thus, the crisis reason roots in the society reaching to a belief that the government can no longer support the rate of the currency.

The Third Generation Pattern

The literature of the monetary crises that recognizes the transference of the crisis from one country to another for the real and financial ties between those countries, as one of the significant factors of the creation of the crisis, was helpful in identifying the spread of the monetary crises and their size and breadth. The patterns of the first and second generation did not provide a specific strategic urges for the central banks in the confronting a crisis. In fact, Krugman in the first generation mentions that a crisis cannot be prevented; for the decrease in the value of a common currency is inevitable. Thus, the third generation models of monetary crisis that are developed by Krugman, Aghion, Baccehetta, and Banarjee, are considering the effect of monetary policies on the monetary crises.

Actually, the first generation model of Krugman announced that as a crisis can not be thwarted because currency devaluation is inevitable. For this reason, the third-generation currency crises models suggested by Krugman , Qyvn, bhaktas, and Banarajy , the effects of monetary policy on the financial crisis were considered.

The Fourth Generation Model

In general, institutes through two mechanisms are affected on currency crisis's. First, the institutes impact on the health of the national economy and there is a correlation between them. Thus, the institutes in which lead conditions towards fundamental economic false varieties are effective to create currency crises. While the institutes taking right steps on the economic fundamentals, they have protected one of the causes of the crisis. Second, institutes consist of useful information. The institutes guide the market factors regarding economic fundamentals in future. As a result, organizations related to false economic fundamentals [3] cause the market expectations volatility, market uncertainty increase concerning the probability of a currency crisis and increase of the likelihood of impulse flow

through the market external output . The institutes that are associated with good economic conditions stabilize expectations, reduce market uncertainty about the probability of currency crisis and protect to leave investment (Shympaly or Brewer [4] , 2006).

History of Research

IMF (2008) in a report titled "Effects of Global Financial Crisis on Low-Income Countries" examines various aspects of the crisis and the ways through which low-income countries may be affected by the financial crisis have examined. The study noted that because of low financial integration with global financial markets, these countries' financial sector recession will not directly spread recession ,but in developed countries, economic recession make serious problems resulted by reducing the price of these countries' exports, reduction of global helps , reduction in foreign direct investment and These countries. This research also noted reduction of the price of imported goods and also its positive effect.

Azar and others (2007) have evaluated the impact of a series of factors on the growth of firms and small enterprises in Turkey. One of them is financial crisis in Turkey (2001) in which has been studied in the hybrid data model. Destructive effects of the financial crisis on enterprises and small economic organizations as well as seen. The study concluded that the factors cause the growth of these firms will lose its effectiveness during the crisis. The distinction between these mentioned studies with the next research is that this mentioned research evaluates the effects on macroeconomic variables, while the research on the impact of the crisis on small enterprises and economic organizations can be seen.

Khezri, 2007, in his article titled Analysis of America's economic effects of the financial crisis on Iran's economy, while recognizing the nature and origins of the economic crisis in America, analyses the crisis effects of the world economy on Iran's economy. According to the author, the main cause of the crisis is not functioning competitive market, is improper intervention of America's government in the economy. The author argues that the recession in the world economy will be affected developing countries and Iran would not be safe by the negative effects in such a way that the economic recession is likely to gradually strategic profile.

Farzin Vash and others, 2008, in an article titled world experience to deal with the financial crisis and lessons for Iran's economy to earn a teaching policy to deal with the crisis in the economy, first discuss the roots of the recent financial crisis in the United States economy and contagion to the global economy and then explain the various monetary and fiscal policies to deal with the financial crisis on global experience, from both theoretical and experimental. The results show that different countries due to economic conditions and the vulnerability of the recent financial crisis have applied many economic policies in order to deal with the crisis.

Hasan Zadeh, 2009, in a study titled, the possible effects of the global financial crisis on Iran's households' income in both rural and urban, examines computable general equilibrium modeling approach of the impact of the crisis on households' welfare and proves that the recent crises on the demand for goods and services and the changing global commodity prices could affect Iran's foreign trade sector and currency revenues and thereby affect the country's macro-economic variables and ultimately will affect households' welfare. Researcher shows different scenarios of changing commercial prices and foreign savings and has concluded that the financial crisis has had more influence on high-income groups. In this study, the researcher has used the general equilibrium modeling in which effects of the crisis on trade and foreign savings are investigated.

Mohammad Hossein Ghaemi (1999), in this PhD research examines the factors affecting stock returns of listed companies in Tehran Stock Exchange deals. In this research, five factors, including The systematic study of risk factors, firm size, the ratio of book value to market value, ratio E / P , and trade shares in listed companies in Tehran Stock Exchange for a period of five years (1994-1998) of have been made. The results indicate that the single index of systematic risk (beta) is effective on expected return of shareholders and firm size, the ratio of book value to market value, trading turnover and the ration of benefit to cost on the expected return of shareholders are not.

Bnakvyk (2010), an article titled "Do macroeconomic factors on stock returns influence? Models to observe the sensitivity of return on assets expressed as a function of one or more factors. In this paper analyzes the efficiency of the fourteen stock market capitalization Croatia for the period ,January 2004 to October 2009, using inflation, industrial production, interest rate, market index and oil prices as factors affecting stock returns are used. The results show that the market index has the highest statistical significance For all stock and a positive relationship to the return. Interest rate and industrial production show a positive relationship to the return, while inflation has a negative impact.

Ghadh (2012) in an article entitled "Factors affecting the stock returns of Oman's stock market", This study aimed to determine the most important factors affecting the volatilities and stock return and show that the investors for their investment decisions cover The data for the period from 2005 to 2010. Methodology of this study uses archival data is available for public use. Basically a regression model in the stock exchange in stock companies' data has been used in Jordan. 15 industrial companies are listed on the Amman Stock Exchange (ASE). The results show that each of these three variables on stock return (balance of payments, number of employees and the size of the company) is effective. Other variables (interest rates, budget deficits, GDP and inflation rate) on returns are not affected.

1. offering Research Model

The model is specified as follows:

1- $R = \alpha_0 + \alpha_1 \text{oil} + \alpha_2 \text{EX} + \alpha_3 Dum + \alpha_6 \text{BD} + \alpha_7 \text{Size} + \alpha_9 \text{DP} + \alpha_{11} \text{B} + \alpha_{12} \text{P} + \varepsilon$

That R is Stock return index as the dependent variable, Oil is the amount of Dollar earnings from oil sales, Ex is The official exchange rate, B is Systemic risk (beta) Size is Firm size, DP is The amount of the dividend profit in a stock company. According to the study Bnkvych and Pvsdl [7] (2010) consumer's price index variables (P) And variable of global financial crisis (Dum) that is 0 in 2008 and 1 in the other years added to the model.

Some of the variables are calculated as follows:
Stock returns (the dependent variable)
"Return on investment in the stock price is calculated at a limited period with due attentions to the primary and end price of the period and profits derived from ownership of property. The profits in a period that the company has assembly belong to the shareholders and in the period that the company does not have the assembly , property interests will be zero.
Return on investment in shares is calculated using the following equation:

$$R_t = \frac{(P_t - P_{t-1}) + D_t}{P_{t-1}}$$

Rt = Return on common stock during the period t

Pt = Price of ordinary shares at end of period t

Pt-1= Price of ordinary shares at beginning of period t or end t-1

Dt= Benefits of ownership of the common stock = t Were paid to shareholders

The property benefits may be paid to shareholders on various forms mainly as follows.

A. dividend

B: increase capital reserves and bonus shares

(C) Increase of receivable and cash investments "(Rai and Tlngy, 2002)

Beta Criteria to measure systemic risk:

The non-systematic risk can be completely eliminated with a creation of a portfolio, so the non-systematic risk is avoidable, but the systematic risk due to general market cannot be deleted. The amount of systemic risk is the variability of return on an asset is determined by market movements and changes. In other words, the systematic risk is the same-time movements of the stock market index with the stock returns called the market factor or beta.

Beta describes the relationship between stock returns and market index returns. If the Beta is "one" means one percentage point change in market index percent leads to one percentage in stock's price and if the Beta is zero means the stock price has nothing to do with the market index. Beta is a measure for systemic risk and systemic risk cannot be eliminated by diversification.

$$\text{Risk} = \frac{\text{COV(A.M)}}{\text{var(M)}}$$

That A Indicates the contribution of efficiency and M Represents the market return.

4. Estimated model

Initially, the study will examine all evidence of the research's variables, then with due attention to the model presented in this paper, it is estimated that the results are as follows:

Table1: Result of Stationary

متغير	Levin, Lin & Chu t	ADF - Fisher Chi-square	Fisher Chi-square	نتیجه
oil	-8/86820	151/690	263/497	I(0)
EX	-8/99141	56/8355	90/5355	I(0)
BD	-12/5011	85/1050	53/8563	I(0)
Size	-16/6905	90/9011	45/7026	I(0)
DP	-20/8687	118/877	59/1192	I(0)
B	-23/2164	147/753	42/6607	I(0)
P	-13/7860	103/737	42/3342	I(0)

Table2:

Result of estimation

prob	t- statistic	coefficient	
0.0000	-6.053067	-0.139235	C
0.0000	-6.221950	-11.61497	oil
0.0000	4.332100	0.176893	EX
0.0133	-2.539708	-0.454662	*Dum*
0.0000	-10.76056	-0.593179	BD
0.0000	18.49842	0.638484	Size
0.0001	4.313723	1.048840	DP
0.0001	-4.067545	-7.019675	B
0.0001	-4.077315	-7.030826	P
	Hasman=34.67 0.000	F=45.14 Prob=0.000	R=0.67

Dollar earnings from the sale of oil have significant and meaningful negative effect on stock returns index and the exchange rate variable shows positive and significant effect on stock return index and the other model's variables, including risk & inflation, interest rate and crisis have significant negative effect on stock returns and variables of firm size, book value and dividend show a significant and positive impact on stock return index.

5. Conclusions

Globalization is a fact that is moving very fast. In this case, the duties of all countries are to get ready to use the most advantages and avoid its disadvantages. However, financial crises are an integral part of the economy and for whatever reason they may occur at any time. Due to the integration of financial markets and the economy of different countries inextricably linked with each other as a result of globalization, the transition of crises from the initial point to another point is a completely logical result and other countries may face to recession.

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