Analysis of the Role of Protecting Shareholders Rights in Expanding Stock Market in a Selected Developing Countries

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Abstract

The aim of this study is to understand whether in developing countries, level of legal protection of shareholders, considering other important factors which affect the expansion of stock market has a meaningful role in expansion of stock market or not. By using strength of investor protection index which was calculated by the World Bank and using data from 46 developing countries in interval of 2006-2010, we have investigated empirically this hypothesis. Estimation results of econometric model confirm this hypothesis meaning that countries making more legal protection of shareholders have got more expanded stock market.

Key words: Shareholder's rights, Stock market, Business environment, Developing countries

JEL Codes: G28, K22

1. Introduction

By approaching end of 20th century and start of 21st century, reviewing concept of financial development and its effective factors took place. Economists concluded that merely giving attention to the liberalization of the interest rates could not provide enough policy recommendation and an appropriate analysis on factors involving growth of financial sector and gradual progress of the financial institutions were presented as important factors in financial development. Consequently, rules governing money and capital market as important institutions also entered in economic analysis gradually. In stock market as a sector in which relationships between individuals have a relatively high complexity; rules governing those relationships have a significant importance and special consequences. Although jurists and legislators in developed countries since 19th century, when new commercial rules formed in those countries, have paid special attention to this subject; but economists only since mid of 1990s investigated importance of the issue in protecting shareholder's rights seriously. During the two recent decades, economists while expressed the role of protecting shareholder's rights in expanding stock market, have tried by designing some indices to quantify the regulations concerning the protection of shareholders. Studies that have investigated relationship between legal protection of shareholders and expansion of stock market could be divided in two groups.

First group are those studies which by using countries wide samples and with emphasizing difference in level of protection of shareholders in different countries, have investigated the relationship. Laporta et al(1997), Pagano and Volpin(2005), Djankov et al (2005) and Kai Li(2007) by this approach have confirmed that increase in legal protection of shareholders play a meaningful role in expansion of stock market. Second group are those studies which focused on the issue by using more limited samples that whether changes in regulations throughout the time play a meaningful role in expansion of stock market or not. Armour et al (2008) and Sarkar and Singh(2009) by this approach concluded that increase in protection of shareholders has not had a long run effect on expansion of stock market in corresponding countries. Some of the differences in results of these two groups could be explained by referring to this issue that these studies used different indices for measuring level of shareholder protection.

But without doubt some of the differences in results arise from this issue that, effect of difference in institutional variables between countries could be identified better in cross section and panel data studies than the time series studies, because institutional variables in wide samples have more changes. None of the studies done about the relationship between legal protection of shareholders and expansion of stock market so far , have focused on this relationship in developing countries. One of the reasons to this matter is that in past years, there has been no index of calculation for a wide range of developing countries, regularly. But, in recent years an index is calculated by the World Bank which provides us with the opportunity of investigation of that relationship. Strength of investor protection index (IPI), since 2006 published by World Bank annually in Doing Business reports. Strength of investor protection index measures the strength of minority shareholder protections against directors' misuse of corporate assets for personal gain. In this paper, we first review evolutionary process of literature about shareholders rights and its importance as an effective factor in expansion of stock market and improvement of firm's finance, then by using strength of investor protection index and panel data we will investigate the relationship of protection of shareholders right's and expansion of stock market in selected developing countries.

2. Evolutionary procedure of the issue of protecting shareholder's rights

Jensen and Meckling (1976) point out that the return of the cash flows from projects to investors cannot be taken for granted, and that the insiders of firms may use these resources to their own advantages. Jensen and Meckling view financial claims as contracts that give outside investors, such as shareholders and creditors, claims to the cash flows. Hart (1995), focused on investor power relative to the insiders (insiders are managers or controlling shareholders and outsiders are creditors or other shareholders). Economists have used this idea to model financial instruments in terms of the rights they allocate to their holders. In this framework, investors get cash only because they have power. This may be the power to change directors, to force dividend payments, to stop a project or a scheme that benefits the insiders at the expense of outside investors, to sue directors and get compensation, or to liquidate the firm and receive the proceeds. Series of studies which started from mid of 1990s by LLSV (Laporta, Lopez, Shleifer and Vishny) was a beginning to new viewpoint in the issue of investor's right particularly shareholders rights. LLSV (1996) expressed the view that securities are inherently characterized by some intrinsic rights is incomplete. It ignores the fact that these rights depend on the legal rules of the jurisdictions where securities are issued, shareholders in different countries have different rights. Therefore law and the quality of its enforcement are potentially important determinants of what rights security holders have and how well these rights are protected.

Emphasize on legal rules and regulations and quality of their enforcement is clearly in contrast to the traditional "law and economics" perspective on financial contracting. According to this perspective, most regulations of financial markets are unnecessary, because financial contracts take place between sophisticated issuers and sophisticated investors (Jensen and Meckling 1976). But LLSV (1999) note that this perspective relies on courts enforcing elaborate contracts, which in most countries cannot be taken for granted. Indeed, courts are often unable or unwilling to resolve complicated disputes, and are slow, subject to political pressures, and even corrupt. When the enforcement of private contracts through the court system is sufficiently costly, it is possible that other forms of protecting investor's rights, such as judicially-enforced laws or even government-enforced regulations, become more efficient.

LLSV (1999) noted that Investor protection turns out to be crucial, because in many countries, expropriation of minority shareholders and creditors by controlling shareholders is extensive. Expropriation can take a variety of forms. In some countries which shareholder's protection is very poor, the insiders simply steal the profits. In other countries that protection of shareholders is slightly better, the insiders sell the output or the assets of the firm they control, but which outside investors have financed, to another entity they own at below market prices. Such transfer pricing and asset stripping, though often legal, have largely the same effect as theft. In other cases, perfectly legal expropriation takes the form of installing possibly unqualified family members in managerial positions, or overpaying executives. In general the main idea presented here about expropriation is the agency problem that was presented by Jensen and meckling (1976). It means that, separation of ownership and control causes conflicts of interests in the company. In the absence of suitable incentives or supervision, managers will profit from their control over company's resources just in their own will and to the loss for other shareholders.

3. Role of shareholder's protection in expansion of stock market and business environment improvement

The basic prediction of the legal approach is that investor protection encourages the development of financial markets. When investors are protected from expropriation, they pay more for securities, because it is more possible to obtain their asset profit completely. This tendency to pay higher amount make it more attractive for entrepreneurs to issue these securities. Brockman and Chung (2008) have indicated on the role of protecting investors in reducing asymmetric information. They noted that legal and regulatory environment largely determines the reliability of publicly-available information; information asymmetry will be lower (ceteris paribus) for firms operating in stronger investor protection environments. Therefore, a suitable legal framework increases liquidity by protecting investors from unnecessary information asymmetries and thereby minimizing adverse selection costs. On the other hand, if a country's legal framework provides poor protection from insider's expropriation, then we expect liquidity providers to impose large adverse selection costs as compensation for their services.

If the rights of investors are not protected, they will prefer to own their asset's management themselves or become a blocked shareholder. Because if they are minority shareholder through various investments in several firms they can not supervise directly their total assets , and since they can not manage many companies directly at one time, therefore they will avoid new and various investments. On the other hand, entrepreneurs which despite having profitable idea for business don't possess necessary resources have less incentive to work hard. Because in this situation managers or majority shareholders can easily obtain major part of their business profit and entrepreneurs have not enough legal support in receiving their right; as a result entrepreneurship will be suppressed and less investment will occur. On the contrary, in condition that investors are suitably protected, they will profit from variation in assets and entrepreneurs access to cash.

4. Strength of investor protection index (IPI)

Doing Business measures the strength of legal protections of minority investors against misuse of corporate assets by company directors for their personal gain in publicly traded companies. This index focuses on related party transactions that could benefit managers at the expense of other investors. The strength of investor protection index is the average of 3 dimensions of investor protections: rules on the approval and disclosure of related-party transactions (extent of disclosure index), liability of company executives for self-dealing (extent of director liability index) and shareholders' ability to access corporate information before and during litigation (ease of shareholder suits index). The index ranges from 0 to 10, with higher values indicating more investor protection. In this paper we use this index, because it is only index which is provided currently for a wide range of countries annually.

5. Empirical Analysis

5.1. Data and model

In this study we use panel data model to investigate the relationship between protection of shareholders and expansion of stock market. Choosing this method in one side occurs because of non access to data about shareholder's protection during a long time which in turn is a barrier to use time series model (Strength of investor protection index is calculated annually only since 2006), and on the other hand occurs because of ability of panel data in identification of the effects that are not recognized by mere time series data. Our panel dataset contain 46 developing countries over 2006-2010. Selected countries are those that either are among upper or lower middle income countries (according to World Bank division) or, are from Middle East countries. Also countries have been selected that all necessary data for using them in our unbalanced panel model are available.[1]

The main hypothesis of this study is that increase in legal protection of minority shareholders in developing countries lead to expansion of stock market. For empirical analysis of this hypothesis we must specify an econometric model. Most of the previous studies in this area have used three main descriptive variables in their econometric model: 1.GDP or GDP per capita which is used to show the level of economic activities in the country or level of economic development. 2. The variable indicates the level of shareholder's protection. 3. The variable showing the quality of laws enforcement.

[1]) List of countries has presented in appendix.

There are some other groups of studies in economic literature which investigate determinants of stock market development without paying attention to discussion of shareholder's protection. To strengthen our empirical results, we use variables that these studies mentioned in their results as important factors in determining stock market development. In fact our aim is to know whether results so far obtained in previous studies with use of some limited variables, when considering other effective variables on stock market development, are still consistent or not.

Therefore our study's model is specified in this way that dependent variable is the market capitalization of listed companies (market value) as a percentage of GDP that shows the level of stock market development compared to economic activities in country. Market value is obtained from multiplying price of each share by number of shares. Besides, we also use the following indicators as explanatory variables:

Shareholder's protection. We use strength of investor protection index to measuring level of legal protection of shareholders.
Level of economic activities. Laporta et al (1997) express that formation of capital market is probably a process with increasing return to scale, therefore larger economies possibly have larger capital market respectively. We use real gross domestic production (constant 2000 US$) to measuring level of economic variables.
Quality of law enforcement. Better judiciary function in enforcing financial contracts and companies' law lead to decrease in uncertainty and increase investors' tendency to be at stock market. Therefore, it is expected that there have been a positive relation between quality of law enforcement and expansion of stock market. To compare level or quality of law enforcement in countries, we have used the rule of law index which is calculated by World Bank. This index indicates level of respect for laws and their application in a nondiscriminatory manner, separation of executive functions and judicial functions, and respect for and action on judicial decisions.
Investment-GDP ratio. It is concluded in many studies that level of investment is an important factor in stock market development. Because stock market is a financial intermediary and by increasing firm's investment projects, the level of issuing shares by them will also increase.[2] To compare the level of investment, the ratio of gross fixed capital formation to GDP is applied in the model.
Credit to private sector. We use the domestic credit to the private sector divided by GDP to account for financial intermediary development. Since both banks and stock markets intermediate savings towards investment projects, they can be either complements or substitutes. But in recent years most of empirical studies have noted that these two types of financial markets should be considered complements instead of substitutes.[3]
Stock market liquidity. We measure the stock market liquidity with Turnover ratio. Turnover ratio is obtained from dividing exchanged stock value during one year to market mean value during that period (It measures the value of equity transactions relative to the size of the stock exchange). Liquid stock market enables investors to modify their portfolios quickly and cheaply. It facilitates investment projects and makes them less risky. Therefore, we expect liquidity to have a positive impact on stock market capitalization because larger amount of savings are channeled through stock markets.[4]
Financial crisis. After occurrence of financial crisis (after 2008), stock markets in most of the countries had a remarkable decrease in level of market value compared to previous years. We use Dummy variable for 2008-2010 years for evaluation of the effect of financial crisis on stock market.

Since investment-GDP ratio and turnover ratio can have a bilateral relation by stock market capitalization, we use lagged value of investment-GDP ratio and turnover ratio to reduce endogeneity bias. Source of the all variable's data we use is World Bank.

[2]) Yartey(2008) and Billmeier and Massa(2009) have confirmed that investment has a significant role in expansion of stock market.
[3]) Demirguc and Levine (1996), Garcia and Liu(1999), Ben Naceur et al (2007), Yartey(2008), Cherif and Gazdar(2010) have confirmed that development of other financial intermediaries have a significant effect in expansion of stock market.
[4]) Garcia and Liu (1999), Yartey(2008) , Billmeier and Massa(2009) and Cherif and Gazdar(2010) have confirmed that stock market liquidity has a positive effect in stock market development.

5.2. Empirical results

We used Eviews 7 program for estimation of our panel model. For estimation of model at first we identified suitable estimation method. First, the F-test led to the validation of significant cross section effects. So the heterogeneity across countries is confirmed. Test for Fix and Random effect methods with Hausman test conducted, the Random effect method was confirmed. F-test and Hausman test results are presented in Table (I). Estimation results are given in Table (II). Results show that Protection of shareholders has positive and significant effect on stock market development. This conclusion confirms the main hypothesis of our study. This means that more legal protection of shareholders especially minority shareholders against expropriation of their assets by managers and majority shareholders leads to stock market development. Coefficient of shareholder's protection is obtained 9.542. This means that in our sample of developing countries by one unit increase in strength of investor protection index, on average stock market capitalization relative to GDP increase 9.542%. Level of economic activities also showed positive significant impact on stock market development.

This means that when level of economic activities in a country increases, size of stock market increases more relatively. Quality of law enforcement showed positive and significant effect on stock market development. This result indicates, in addition of quality of laws, quality of its enforcement also have significant and important role in stock market development. Development of other financial intermediaries which is measured by level of Credit to private sector is found to significantly increase stock market size. This result imply that in our sample, those countries having more developed banking sector have more expanded markets as well. Lagged values of investment ratio and turnover ratio have not showed significant effects on stock market development, this insignificance may be resulted from occurrence of financial crisis. Financial crisis can affect dynamic relationships that exist in stock market between investment, liquidity of market and value of market. Dummy variable coefficient in Table (1) showed that occurrence of financial crisis has put a negative significant effect on ratio of stock market value to GDP. Size of coefficient show that in our sample countries this ratio after occurrence of crisis has decreased 27.08% on average compared to years 2006 and 2007.

6. *Conclusion*

In stock market as a sector in which relationships between individuals has a relatively high complexity, rules governing these relationships have a special importance. Since managers of companies often are elected by blocked and majority shareholders, the subject which is more emphasized regarding company laws is the protection of minority shareholder's rights against expropriation of managers and controlling shareholders. In this study, by using 46 countries data during interval 2006-2010 we investigated empirically the relationship of increase in legal protection of minority shareholders and stock market development in developing countries. Empirical results of this study show that protection of shareholders has a significant role in stock market development. According to estimation results, in our sample countries, by one unit increase in strength of investor protection index, on average stock market capitalization relative to GDP increase 9.542%. Therefore, making legal modifications along with improvement in protection of shareholders rights in developing countries, while protects shareholders particularly minority shareholders against possible misuses, could be regarded as a positive act towards expanding stock market as well.

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Table I. F-test and Hausman test Results

Fixed Effects Tests		Hausman Test	
Cross-section F:	17.8917	Chi-Sq. Statistic:	7.4797
0.0000	Prob:	Prob:	0.3807

Table II. Regression Results

Variable	Coefficient	t-Statistic	Prob
Shareholder's protection	9.542	3.583	0.0004*
Level of economic activities	0.0544×10^{-9}	2.114	0.0358**
Quality of law enforcement	16.414	1.860	0.0643***
Investment rate	0.188	0.403	0.6868
Credit to private sector	0.706	4.726	0.0000*
Stock market liquidity	0.043	0.832	0.4063
Financial crisis dummy variable	-27.084	-9.487	0.0000*
R-squared 0.384 F-statistic 17.49418 Prob (F-statistic) 0.0000			

*, **and *** shows 1%, 5% and 10% level of significance, respectively.

Appendix: List of countries

Argentina- Armenia- Bahrain- Bolivia- Botswana- Brazil- Bulgaria- Chile- Colombia- Costarica- Ecuador- Egypt- Georgia- Ghana- India- Indonesia- Iran- Jamaica- Jordan- Kazakhstan- Latvia- Lebanon- Lithuania- Macedonia- Malaysia- Mexico- Morocco- Pakistan- Panama- Paraguay- Peru- Philippines- Qatar- Romania- Russian Federation- Saudi Arabia- Serbia- South Africa- Thailand- Tunisia- Turkey- Ukraine- United Arab Emirates- Uruguay- Venezuela- Vietnam.