The effects of coupon distribution program stocks on the stock exchange in Central and Eastern European countries

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In the early 1990s after the collapse of the Soviet Union, all countries in East and Central Europe had to reform their economic, political and social bases. About economic reform, the first and the most important step was the privatization of state enterprises. Therefore, the distribution of shares of stock stamps was considered private advocates. This article attempts to examine the effects and consequences on the economic situation of these countries compared to the determinants indices on stock. The research results show that voucher privatization has negative impact on development of stock exchange in the short and medium term.

Key words: Privatization, economic reform, vouchers, stock and stock exchange.

INTRODUCTION

Following the rapid political changes in Central and Eastern Europe in the early 1990s, many states faced new challenges and initiate the establishment of political stability in emerging market oriented system. Many advocates of economic reforms in Central and Eastern Europe found that private sector development and privatization of state enterprises based on market-based economy is essential (Bennett et al., 2004). Some of people knew privatization as a way to reorganize the communist elite's political power base of economic and political decisions (Hermes and Lensink, 2000). Others believed that it is necessary for the privatization of public resources, in addition privatization, also provides the income needed to create job opportunities for workers who are unemployed in reorganizing industrial (Chiesa and Nicodano, 2003). Also reduced administrative responsibilities of government and government intervention in the management firm responsible and needed for quality products and services will create more favorable.

This transition process in these countries has been more difficult than Western European countries for the following reasons:

1. In Central and Eastern Europe, governmental and quasi-public ownership plays extremely important role in people's economic life.
2. There was no market-based financial system and financial markets in developed countries.
3. Active countries in business did not finance and operations experience within the market.

Therefore, policy and decision makers in central and eastern European countries that had recognized the conventional methods of privatization are not useful tools for changing the state ownership of firms in the country.

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These factors caused the direct sale of large state-owned enterprises in these countries impossible. In addition, the lack of domestic savings and investment in businesses means that many firms should be sold to foreign investors, but this is unacceptable in some countries’ political view. The problems and barriers had very difficult conventional methods of privatization in Central and Eastern European countries, therefore, these countries use other methods for privatization of state enterprises to develop their private property including the privatization programs based on stock coupon distribution that were in many countries of Central and Eastern Europe.

**Research background**

Most of the time the goal of privatization vouchers distributed in the countries is not to develop stock market. A study that has approved importance of financial institutions and capital market regulations on market is been done by Claessens et al. (2000). They studied 20 countries in transition using different indicators to evaluate stock market development in the countries and also concluded that these markets are very weak in comparison to stock markets in industrialized countries. In another study conducted by Susanna (2005), investigated the role of the privatization program in the formation process of the stock market in countries. The purpose of this study is to test the different paths in the stock market development in transition countries compared to the privatization method. In this study, data of 27 countries of East and Central Europe and Central Asia has been used. The study period is from 1990 to 2003.

**LITERATURE REVIEW**

The stock market development in countries of Central and Eastern Europe Slovenia, Hungary and Poland were the first countries that their stock markets have opened respectively, in the spring of 1990, summer 1990 and spring 1991, and Czech Republic, Slovakia and Lithuania established their stock markets in 1993 (Pajuste, 2002). In Latvia and Romania trade in the stock market began in mid-1995 and the stock market was founded in Estonia in the spring of 1996 (Table 1).

**Market capitalization**

Current market value of the stock was presented current value of the stock exchange in Central and Eastern European countries during the years 2001 to 1995 (Table 2).

**Liquidity**

Current value of market is included in all accepted companies, so it may be unrealistic. Especially in countries which have followed mass privatization of companies, subject to compulsory admission and transfer of the stock market (Fungacova, 2005). Because of this we have investigated turnover as the market value of the current market in this part (Table 3).

**Variables**

The following are the most important variables used in this study:

1. The indices development of stock market In this study, development of stock market using indices such as the current value of stocks, shares and stock market liquidity, is measured which recently entered the market.
2. The stock market current value: The most common indicator used to measure stock market development is market current value that reflects the total value of domestic shares listed on a stock is determined.

### Table 1. Number of shares accepted in the countries of Central and Eastern Europe Stock figures: million shares.

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Table 2. The value of the stock market of the countries of Eastern Europe and central figures: millions of U.S. dollars.

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Source: Homepages of National Stock Exchanges.

Table 3. Current value of market accepted countries.

<table>
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</tbody>
</table>

Source: Homepages of National Stock Exchanges.

3. Liquidity measures: Despite the current stock market the liquidity indicators are accurate actual stock market activity of stock market, and they are not worthless by those shares listed on a stock exchange. Increase in this index, especially for emerging markets seems unnecessary because higher liquidity reflects more confidence to investors in the stock market.

4. New capital raised

5. Another indicator that is used for measuring the stock market development in transition countries, is the amount of stock adding to stock markets of countries.

**RESEARCH HYPOTHESES**

In this study, the distribution of coupon privatization is assumed through the stock; these variables have negative effects on the different ways. It is assumed that after a sharp rise in share coupon distribution program in the current stock value has occurred in the countries and volume of shares traded and turnover ratio to the current value have been reduced as indicators of stock market liquidity. The most important descriptive variable for this analysis, is privatized the stock through vouchers. This issue by creating a virtual variable is considered exogenous.

The first research hypothesis is that the coupon privatization through the stock employed in the country, does not affect the development of stock markets in these countries. Next assume is that the mass privatization of the stock market (or negative) is affected.

**Test hypotheses**

To test this hypothesis, the model is estimated:

\[ \text{Market_ind} = \text{Cost} + \beta \times \text{Priv_effect} + \epsilon \]  \hspace{1cm} (1)

Market_ind in this equation represents an index of stock market development (Current value of equity ratio, turnover, value-added transactions and new investments).

Explanatory variables in the equation are defined as follows.

1. Priv_effect: Calculate the different effects of privatization on the stock market are the following:
Priv_effect = β1. Priv (1a) 
= β2.t. Priv (1b) 
= β3. Priv+β4.t. Priv (1c) 
= β5. Priv_ Prim +β6.t. Priv_sec (1d) 
= β7. Priv_ Prim +β8.t. Priv_sec (1e) 

2. Priv is a virtual variable, if you are looking at the stock performance of privatization through vouchers is equal to one and will be zero if the other methods of privatization is implemented.
3. Priv_prim is a virtual variable, if a certain country privatized through voucher privatization is the primary method of stock is one, otherwise equal to zero.
4. Priv_sec is a virtual variable, if a certain country that shares of privatized through voucher privatization is secondary method of stock is one, otherwise equal to zero.

The coupon privatization through the stock usually takes several years and its effect on the stock market is not visible in the early years of privatization.

So in this study, all three variables are estimated as follows:

i. Without delay (priv)
ii. With a year's delay (priv _t-1)
iii. The two-year delay (priv _t-2)

In order to obtain more accurate results from estimated impact of privatization vouchers on the stock market, a virtual state variable was added to Equation (1) and the following model is estimated:

Market_ind=Const+ α. Country + β. Priv_effect + ε (2)

Country is a country virtual variable and it is a very widespread variable; in fact this variable contains all features of a country that should be taken into consideration. In this study variance framework, the impact of privatization on capital market development) is estimated without the state (Equation 1) and the state (Equation 2).

RESULTS

As mentioned earlier, in this study to prove the relationship between the privatization and stock market performance, stocks were used from the majority of available information from the countries in transition (Megginson et al., 2002). The main objective of this paper is show that this type of communication has existed in countries in transition. Based on data obtained, Rightness of the first research hypothesis that stated in the short and medium term, privatization through the stock coupon has a negative effect on stock market development, is confirmed. Also, the relationship between privatization through the stock coupon and stock market development by using the various indices of stock market has been approved. More, the results of estimation of this model based on various indicators of stock market developing that used as independent variables, is presented.

The ratio of stock market current value to GDP

The results indicate a positive effect of privatization by stock coupon to the current value of the stock market. Meaningful changes in privatization virtual variables by stock coupon show that, following the implementation of privatization through stock coupon, this ratio suddenly increased.

Volume of traded shares

Based on this investigated results, the effect of privatization on the stock exchange volume is significant. Also research findings state that the value of exchanged stock in comparison with stock current value is impressed by privatization through stock coupon, indirectly.

The ratio of turnover to the current value of the stock market

This ratio is another criterion to evaluate the performance of the stock market in studied countries, that the results in this case confirm previous results and first hypothesis.

New capital raised

Unlike the turnover ratio variable, because of lack of the gathered information accuracy about new capital raised, the results are not significant in most cases.

CONCLUSION

We conclude that the countries through the implementation of privatization vouchers to the stock market as merely has been a secondary product of the privatization process, because of this mistake, Stock markets is not successful in the countries where its main task is to provide the necessary financial resources for investment by firms. Opaque market in the country was founded because of the thousands of worthless securities, causing the confidence level of investors was reduced to stock market countries, and capital market countries coupon distribution equity program does not help the economic growth. But now the stock market
indices around the world have improved. It seems these countries should be more cautious approach to clash with the stock market. In particular, the shares of companies that lack the qualifications necessary for entry to the Stock Exchange did not mandatory to enter this market. Because the Stock market countries have been many problems in future.

REFERENCES