

Full Length Research Paper

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

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Accepted 26 June, 2012

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

Country	1994	1995	1996	1997	1998	1999	2000	2001	Total
Czech Republic	1028	1716	1670	320	304	195	151	102	5486
Estonia	0	0	19	31	29	24	21	17	141
Hungary	40	42	45	49	55	66	60	56	413
Latvia	0	17	34	51	68	67	63	63	363
Lithuania	183	351	460	667	1365	1250	1188	902	6366
Poland	44	65	83	143	198	221	225	230	1209
Romania	0	9	17	75	126	126	115	65	533
Slovakia	52	850	970	918	833	830	866	888	6207
Slovenia	0	0	0	85	92	134	154	156	621
Total	1347	3050	3290	2339	3070	2913	2843	2479	21339

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

Country	1995	1996	1997	1998	1999	2000	2001	Total
Czech Republic	9186	14248	12786	12045	12956	11391	9191	81803
Estonia	0	728	1139	492	1795	1733	1473	7360
Hungary	2399	5273	14975	14028	16433	11926	10210	75244
Latvia	10	151	337	688	880	590	687	3343
Lithuania	380	1253	2173	2959	3177	3052	2626	15620
Poland	4564	8390	12135	20461	29882	31399	25933	132764
Romania	100	61	632	357	317	366	1228	3061
Slovakia	5354	5770	5292	4117	3568	3268	3458	30827
Slovenia	312	891	1625	2450	2880	3110	3387	14646
Total	22305	36765	51094	57597	71888	66826	58193	364668

Source: Homepages of National Stock Exchanges.

Table 3. Current value of market accepted countries.

Country	1994	1995	1996	1997	1998	1999	2000	2001
Czech Republic	1328	3656	8424	7070	4806	4676	6621	3479
Estonia	0	0	288	1681	1031	489	573	232
Hungary	265	348	1606	7685	16104	14848	12248	4834
Latvia	0	0	12	85	85	43	276	161
Lithuania	16	37	47	239	223	309	202	38
Poland	5134	2781	5543	7951	8918	11917	20759	10091
Romania	0	0	5	332	193	97	85	131
Slovakia	0	835	2607	2369	1012	486	540	0
Slovenia	366	345	400	547	810	917	649	361

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:

$$\text{Market_ind} = \text{Cost} + \beta \cdot \text{Priv_effect} + \varepsilon \quad (1)$$

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:

$$\text{Priv_effect} = \beta_1. \text{Priv} \quad (1a)$$

$$= \beta_2.t. \text{Priv} \quad (1b)$$

$$= \beta_3. \text{Priv} + \beta_4.t. \text{Priv} \quad (1c)$$

$$= \beta_5. \text{Priv_Prim} + \beta_6.t. \text{Priv_sec} \quad (1d)$$

$$= \beta_7. \text{Priv_Prim} + \beta_8.t. \text{Priv_sec} \quad (1e)$$

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_t)
- 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:

$$\text{Market_ind} = \text{Const} + \alpha. \text{Country} + \beta. \text{Priv_effect} + \varepsilon \quad (2)$$

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 indicates 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.

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