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PENSION REFORM AND THE DEVELOPMENT OF CENTRAL AND EASTERN EUROPEAN CAPITAL MARKETS.

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Abstract: *In this paper the authors analyse the effect that the pension reforms might have on the functioning and on the development of the capital markets from Central and Eastern European (CEE) countries. The main contribution of the paper is to relate, from a theoretical point of view, and with statistical data, the fully-funded privately-managed pension systems with the process of capital market development, focusing on CEE countries case. We also analyse the extent to which the quantitative literature has validated this theory, offering some final conclusions about possible further empirical research in this respect.*
Key words: *pension, reform, capital market, Central and Eastern European countries*

1. INTRODUCTION

In this paper the authors analyse the effect that the pension reforms might have on the development of the capital markets from CEE countries. The paper is organized as follows: section II reviews the theoretical background concerning the link between pension funds reform and capital market development, highligthing the most significant empirical papers which have approached this subject, section III makes an analysis of the statistical data meant to support the theoretical background, section IV concludes and gives some ideas about further research.

2. THEORETICAL BACKGROUND

The interest in pursuing pension reform shown by developing countries and economists around the world, assumes that privatization of social security, and more specifically, the creation of fully-funded privately-managed pension systems has important positive effects on savings, fueling economic growth and productivity. In addition to these direct effects, it may also accelerate the process of capital market development, improving growth and welfare (Walker & Lefort, 2002).

Pension funds are defined as means whereby assets are accumulated to cover or provide collateral for pension benefits, in which context they act as institutional investors involved in management of assets on the capital market. Accordingly, they directly fulfill the functions of transferring resources over time and pooling of funds. Overall, pension fund growth tends to shift financial markets towards a "capital market oriented" stage of financial development, where the functions outlined above may at least in some ways be more efficiently fulfilled than in an economy dominated by banks. The quantitative impact of development of pension funds on capital markets, except from potential increases in saving, arises mainly from differences in behaviour from the personal sector. Pension funds in most cases hold a greater proportion of capital-uncertain, long-term assets than households. Given their size, pension funds also have a comparative advantage in compensating for the increased risk by pooling and diversifying across assets whose returns are imperfectly correlated, an advantage linked also to lower transactions costs for large deals (Davis, 1998).

According to Hryckiewicz (2009) there are two views of how the institutional growth may promote the development of the local securities market: the increased demand for the local securities and the contribution that these institutional investors bring to the reduction of information asymmetries.

As far as concern the empirical studies made in close connection with the debated issue, we noticed that there are few studies made in this respect, with focus on CEE countries. From the most recent, it is worth mentioning the one realized by Hryckiewicz (2009) that uses a GMM panel technique on the sample of eight CEE developing economies: Poland, the Czech Republic, Slovakia, Slovenia, Hungary and three Baltic states within the period of 1995-2006. The econometrical model was:

$$y_{i,t} - y_{i,t-1} = (\alpha - 1)y_{i,t-1} + \beta X_{i,t} + \delta_i + \lambda_i + \varepsilon_{i,t} \qquad (1)$$

where:

$y_{i,t} - y_{i,t-1}$ - is the difference in tock market capitalization relative to GDP

$X_{i,t}$ - is a set of explanatory variables, including a measure for institutional investors' development in relation to the domestic financial assets

Hryckiewicz (2009) founded that the growth of the institutional investors in the CEE countries significantly contributes to the development of the securities markets in these countries by improving corporate governance practices and increasing transparency, the independent variable being positively correlated with the stock market capitalization.

3. STATISTICAL DATA IN SUPPORT OF THE NEXUS BETWEEN PENSION REFORM AND THE DEVELOPMENT OF CEE CAPITAL MARKETS

Beginning with the '90, the majority of the CEE countries have initiated reforms of their pension systems, in close connection with the ones realized by EU-15 countries. As far as concerns the first pillar (the public pension system), the following changes have been made: the retirement age has been increased, the volume of the anticipated retirement requests has been reduced, the pension methodology has been improved. In the same time, the second pillar was introduced (fully-funded privately-managed pension systems), based on individual accounts. With the exception of Czech Republic and Slovenia, the third pillar is currently less developed. Therefore the role of the pension funds for the domestic capital markets has grown over time, once with the accomplishment of all these reforms. Many IPOs were subscribed by such kind of investors, the bond market was also supported by the existence of the institutional investors, that looked for this long-term placements, and find the corporate, county and state bonds very attractive.

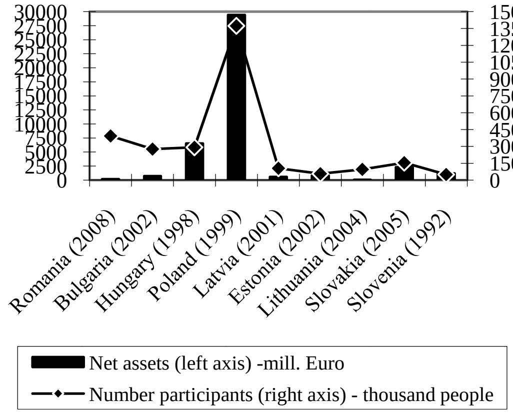

Fig.1. Net assets and number of participants - 2nd Pillar (2008)
Note: For each CEE country we have in the paranthesis the year of introduction of the 2nd Pillar
Source: data supplied by CSSPP (2010)

We are talking about a real market force of the pension funds, because of their strong growth over the time and of the fact that their presence started to be visible on the CEE capital markets once with the introduction of the second pillar. This did not happened at the same time in all CEE countries, therefore the moment when the positive influence on the domestic capital market was felt was different for every country (Fig.1).

As we can easily notice from the above figure, two of the countries which have introduced before 2000 the 2nd Pillar (Poland and Hungary) benefited in 2008 from the largest amount of net assets (29408,86 respectively 6520,01 million Euro) and some of the largest number of participants from the CEE countries (13740, respectively 2920). Romania, the last one (from the considered CEE countries) who has introduced the 2nd pillar has obviously one of the lowest volume of accumulated net assets (166,08 million Euro).

According to the latest data provided, in 2008, a ranking of the CEE countries considering the market capitalization of their stock markets can bee seen in the figure below (Fig.2).

Another important aspect when talking about the influence of the pension reform on the domestic capital market is the structure of the investments made by the pension funds. This structure could lead to a development of the local bond market (if the structure of the portfolio is more focused on fixed return instruments), to the development of the local equity market (if the structure of the portfolio is more inclined to acquiring stocks) or it could lead to almost no impact on the domestic market, the structure of the portfolio being focused more on international capital markets. Therefore, the situation may vary across CEE countries.

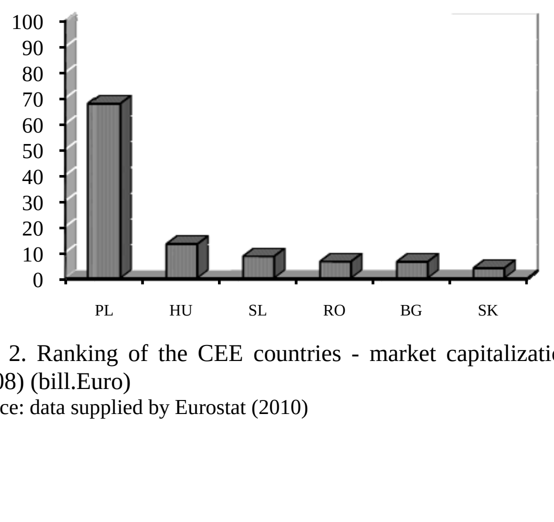

Fig. 2. Ranking of the CEE countries - market capitalization (2008) (bill.Euro)
Source: data supplied by Eurostat (2010)

Considering the structure of the investments made by the pension funds in 2008 (CSSPP, 2010), we can mention through the countries with the largest percent of investments made in the equity market Poland, Bulgaria and Hungary (25,07 %, 20,66 % and 16,06 %), and with the lowest percentage Romania (1,85 %). Considering the fact that, in general, the bond markets from CEE countries are less developed than the equity markets, we will rather see the connection between the pension reforms and the development of the CEE capital markets, focusing on the equity market capitalization.

We can therefore state that in the countries where the pension reforms were implemented sooner (like in Poland and Hungary), the degree of the development of the domestic capital markets is also very high, in comparison with the other CEE countries. Of course, this statement, in order to be accurate, must be suppported by empirical prove, using econometrical models and taking into consideration also other determinants for the development of the local capital market.

4. CONCLUSIONS AND FURTHER RESEARCH

The experience of the most developed countries from the considered CEE countries shows us that the implementation of pension reforms has a significant positive influence upon the domestic capital market. In our opinion, the effects generated from the private pension funds are not yet significant for all the CEE capital markets for two reasons. First of all, the uncertainty climate and major capital losses registered on the capital market more recently, with the financial crisis, have released a certain reserve from the part of the persons in charged with the investment decisions, being more cautious in their approach to choosing investment instruments and assume risk. On the other hand, these alternatives are preferred also because there is this politics that, in the first years of pension reform implementation, the majority of their assets must be placed in low risk financial instruments, for prudential reasons and for covering the provisions and guarantees required by the law. This is the main reason why we think that in the years to come, the influence of the pension reforms on the CEE capital markets will become more visible. The main limitation of our paper is not realizing an econometrical model for quantifying this influence. This is the reason why, for further study, we propose ourselves to develop an econometrical model, with a sample of 10 CEE countries, and having 1995-2009 as time horizon in order to prove empirically the connection mentioned above.

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