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Abstract

**The impact of privatization on the cost of capital in energy sector enterprises**

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The doctoral dissertation concerns the question of the enterprise’s cost of capital in the context of privatisation. The valuable Polish privatisation experience gained during the past years enables one to grasp the phenomenon from the financial point of view based on a theoretical approach to changes in ownership structure and other factors impacting financial indices. The survey covered energy companies which were privatised through the Warsaw Stock Exchange between 1998 and 2021.

 The principal **research objective** of the dissertation is to examine the impact of indirect, capital privatisation on the cost of capital in the enterprise. The examination of that relation requires a financial analysis of enterprises before and after privatisation. **The research problem of the thesis is** the analysis **of the impact** of indirect privatisation on the cost of capital in the enterprise, while the **research hypothesis** relates to the form of privatisation and the lack of its impact on the cost of capital in the enterprise.

 The privatisation model applied in the Polish economy was adopted in the State Enterprises Privatisation Act of 13 July 1990; it was equivalent to the elements of enfranchisement by employees and citizens. The liberal model which was then implemented in the Polish economy assumed the participation of foreign investors, who had the appropriate amount of capital for such investments. Acquisition of enterprises by foreign organisations enabled capital transfers to their home countries, which resulted in lack of further investment in technology on the Polish market. The first negative consequences of enterprises being acquired below their replacement price led those in power to involve institutional investors on the capital market. The National Investment Funds did not fulfil their goals, while the approach to privatisation involving the establishment of groups of companies and the sale of developed entities to professional investors is still applied. The economic objectives of privatisation are directly linked to the social and macroeconomic ones, i.e. ensuring workplaces for a specified number of citizens and sustaining the country’s trade balance.

In Poland, privatisation by means of capital markets took three different forms. The State Treasury sold a complete package to a professional investor or performed a complete enfranchisement of the enterprise. In the second form, the State Treasury issued shares and sold only a part of their package through the Warsaw Stock Exchange. In the third, the issued shares increased the enterprise’s equity, diluting the State Treasury’s percentage share in the shareholding. The objective of this form of privatisation was to involve new investors to restructure and invest in capital-intensive ventures. Privatisation programmes aimed at establishing competitive business entities with a strong market position, stable financial bases, and optimal growth opportunities. The initial phase of the economic transformation was characterised by lack of capital and a fledgling financial market. This changed over time as the situation improved. Many different factors stimulated the growth, one of them being the very need to develop the capital market’s infrastructure and adapt it to privatisation needs.

The surveyed companies were privatised in various periods of time, which impacted the research and its results. Privatisation conducted over 30 years entailed changes in terms of the legal and financial environment, development of the financial market, availability of new forms of financing, and most of all, changes in the subsequent governments’ approach to privatisation itself. Energy enterprises were privatised through the stock exchange from 1998 to 2013. By no means was the privatisation of energy companies caused by their looming bankruptcy; on the contrary, it stemmed from the desire to adapt their operations to free market conditions, to gain greater opportunities for financing the modernisation of capital-intensive infrastructure, while still maintaining the state control over them. Privatisation through the stock exchange is the most transparent form given various supervisors and the oversight of institutions such as the Warsaw Stock Exchange and the Polish Financial Supervision Authority. Though dispersed, share buyers may provide a similar amount of capital as a professional investor outside the stock market. The capital market is the heart of the financial markets organism. An efficient stock exchange creates an added value both for the enterprises and for whole economies. The efficacy of capital allocation in economies transforming into free market economies is of even greater importance than in the developed ones.

A significant aspect of privatisation in Poland is the development of financial markets thanks to the Polish accession to the European Union in 2004, which made access to foreign markets easier and brought about an adaptation of financial regulations to those in force in other EU Member States. Despite its short history in the free market economy, Poland quickly changed its internal regulations so as to enable the Warsaw Stock Exchange to bring profits to investors and become a competitive intermediary for those who wanted to amass capital. Privatisation of state property, if conducted properly, regulates business interactions in free market economy. This results in increased efficiency and improved competitiveness. The energy sector, which is of strategic importance for any country, attracted substantial attention among investors, which is why Polish governments began by consolidating the sector before moving on to indirect privatisation.

Significant factors impacting that structure included the product market and sector-specific factors. Enterprises with a large share of tangible assets declare a greater indebtedness, while smaller organisations with a high share of intangible assets - lower indebtedness. Given the above, the author of the doctoral dissertation has attempted to group the factors which verify the research hypothesis according to the sector in which the privatised enterprises operate.

The enterprises were examined by means of financial analysis. In the dissertation, the capital was mainly treated in terms of financial value which fulfils settlement functions and has an economic value. Even so, the author has not disregarded, in the theoretical chapter, the presentation of other definitions of capital. The analysis of financial statements was conducted by means of accounting data obtained from financial statements.

The following research methods were applied during the examinations, hypothesis verification, and the analyses of the aforesaid economic relations and processes:

* case study,
* financial data analysis,
* graphic comparative analysis,
* statistical analysis,
* hypothetic and deductive analysis,
* descriptive methods.

The thesis comprises 5 chapters: three theoretical and two methodological and empirical. The theoretical chapters study the Polish and foreign literature. The chapters concern the theory of privatisation, capital structure, cost of capital, sources of enterprise financing as well as methods of their evaluation. The research chapters contain the financial analysis of particular enterprises, present the specificity of the sector and factors impacting the research problem, and summarise the verification of the research hypothesis.

 The first, theoretical, chapter analyses the conditions for the privatisation of enterprises from the legal and economic point of view. It presents privatisation forms, methods, and techniques.

 The equity of an enterprise determines its operations, it is commonly construed from the financial perspective, as the sum of funds which finance the assets. From the accounting perspective, it is linked to the liabilities recognised by the enterprise in their balance sheet. The equity provides information about the enterprise’s financial position, it facilitates development planning and allows to shape the effectiveness of the functioning of economic organizations. The **second** chapter concerns theories of the cost of capital. Such theories are primarily based on distinguishing the sources of the acquired capital and the use of a method that determines its cost. This part distinguishes the types of enterprise financing sources in detail and provides an accurate distinction between equity and foreign capital, and the cost thereof. The concept of sources of enterprise financing includes the issue of the quality of financial market infrastructure, thus an attempt was also made to present this topic. By contrast, the cost of foreign capital is equalled, in the simple version, to the interest on the capital or, in the extended version, to the interest rate. Foreign capital interest rate may be increased by commission fees. The cost of equity is defined, in the simple version, based on the Gordon model, i.e. the discounted dividends or, in the extended version, on the basis of the capital assets pricing model (CAPM). The cost of equity may be counted, on developed markets, by calculating all components or selection of regional or sector factors.

 The **third** chapter comprises theories related to the capital structure and the valuation of the enterprises. Capital structure in enterprises may be construed in many ways. The structure of financing sources refers to the size of acquired foreign funds in proportion to the equity. One may use the liability to assets or equity ratios, which facilitate the classification of enterprises and allow for an easy comparison of their financial position. The capital structure may be defined as the structure of liabilities, which entails that it is the enterprise’s financing structure. If the capital structure is only the fixed capital structure, then the concept will be narrower than the financing structure. The situation will be similar if the capital structure is equated with the structure of issued equity and debt securities.

 Wishing to maximise the value of the company’s assets, company management is forced to minimise their operating and financial costs. Financial, controlling, and strategic departments prepare projections which account for various investment opportunities and financing options. Each proposal brings a certain level of risk, which is usually strongly correlated with the rate of return. The cost of capital issue is an obligatory concept in each enterprise. The variety of financing sources enables company management to develop a beneficial capital structure from the perspective of owners and operational security. Company owners expect maximisation of profits, while the management needs also to ensure at least minimum financial liquidity. When only equity is used, the return on equity is the same as the return on assets, while when foreign capital is used, the owner expects to obtain a higher return on the invested foreign capital than the cost of the capital itself.

 The fourth, chapter presents the sector characteristics with all of its essential elements which impacted the course of the analysis. It presents the surveyed companies together with their financial data and calculated ratios, which are necessary to examine the cost of capital of the companies under scrutiny. Privatisation was assessed in terms of the research problem.

 The final chapter presents the analysis process of the data and the obtained results. The research hypothesis was verified. The research concerned companies listed on the Warsaw Stock Exchange, therefore the thesis is of a case study nature. Non-listed companies do not publish their financial data and thus it would be impossible to examine them. The calculation basis was based on the theoretical approach to privatisation, the cost and the structure of capital. The calculations were presented in a table and graphically, with the static hypotheses verified. The deduction process is in line with the adopted norms, while the research problem may, in the future, be extended to cover other sectors in Poland or privatisation experiences from other countries in the region.