THE ANALYSIS OF THE FINANCIAL RISKS IN THE PHARMACEUTICAL INDUSTRY IN ROMANIA

BALTEŞ Nicolae[1]**, MINCULETE (PIKO) Georgiana Daniela**[2]**,**

„Lucian Blaga" University, Sibiu

Abstract

The effects of the economic crisis have had a negative impact for most of the companies on the market, but a small part of the existing sectors have coped successfully with these significant economic imbalances. Our research is based on establishing the financial risk in the pharmaceutical sector in Romania and how the companies analyzed succeeded after the year 2010. The paper is based on an analysis of the financial risk using the financial leverage. The effect of the increase in the financial leverage or, to be more precise, in the borrowing rate may be favourable, yet risky. The aim of this article is to highlight the influence of borrowing on the rate of financial return of the companies selected for our case study by its reduction in relation to the rate of economic return.

Keywords: *financial risk, financial leverage, the rate of financial return, the rate of economic return, the pharmaceutical sector*

JEL classification: *G01, G14, G19*

1. Introduction

After the appearance of the economic crisis, risk and uncertainty have increasingly begun to make their presence felt. Most sectors have been more or less affected, and many of the existing companies have taken major decisions given up the "classical" funding and focused mainly on attracting external financial resources. As we know, the word "crisis" consists of two

[1] *Ph. D., Faculty of Economics, Finance Department, baltes_n@yahoo.com*

[2] *Ph. D. Student, Faculty of Economics, Finance Department, georgiana.piko@yahoo.com*

elements: one refers to danger and the other to opportunity (P. Kotler, 2009). For many companies the crisis meant danger, but for some of them it meant opportunity.

Leverage has been the subject of numerous debates, studies and analyses, since the way in which companies manage to attract external financial resources is particularly important for their functionality (Triandafil, C). Any organization will attract external financial resources in a period of boom, sustained growth, especially in order to obtain a wider range of products or enter new markets, but in times of crisis more and more companies decide to run into debt, not taking into account the financial risk involved, measured by leverage mechanism that highlights the indebtedness of the company.

The leverage effect is even greater as the difference between economic return and the interest rate is higher (Baltes, N coord., 2013), but the prudence is the key to success of any business, the use of borrowing requires attention and caution on the part of involve because it limits a large proportion of the financial independence.

As we all know, this type of risk is measured by the leverage mechanism that highlights the company indebtedness and is calculated as the difference between the rate of financial return and the rate of economic return. The higher the difference between the economic return and the interest rate, the greater the leverage effect (Baltes, N coord., 2013), but caution is the key to success in any business, and borrowing requires attention and caution on the part of those involved as it considerably limits financial independence.

The negative value of this indicator illustrates the negative effect of debt as a result of an economic return that cannot cover the interest rate, amplifying the risk of insolvency (Petrescu, S., 2010).The unit value of this indicator reflects the funding of a company from its own equity and a lack of debt, the financial risk being almost nonexistent.

2. The research methodology

One of the few sectors that have not been very much affected by the crisis is the pharmaceutical sector. Innovation and research and development studies reinforced the idea of attracting external resources, many existing companies resorting to funding of this kind. The research is based on the analysis of three companies from the pharmaceutical industry, listed on the Bucharest Stock Exchange, and also is based on the calculation, analysis and interpretation of the rate of financial return and financial leverage, based on the financial statements reported under IFRS (International Financial Reporting Standards).

The strongest companies in this sector are considered to be those companies that can afford a gearing ratio high enough to sustain such investment projects in research and development. They are able to repay debts and to pay interest while maintaining their payment capability; in other words, they must be creditworthy.

3. The financial risk analysis in the pharmaceutical industry

The pharmaceutical sector is one of the few sectors that registered growths during the crisis. Innovations and researches have brought additional value to this sector, managing to break patterns of classic „crisis”.

The case study concerns a detailed analysis of the indebtedness, of the financial risk and the correlation between these two types of rate, of some of the most important company in this industry, namely: Zentiva SA, Biofarm SA Antibiotice SA.

Financial risk is assessed primarily using financial leverage and it is calculated as the difference between total debt and equity (Baltes, N., 2010).

Financial rate of return reflects the ability of the equity to create a surplus of value, after paying the capital borrowed and after that, it will enable payment of capital to shareholders through dividends and remuneration will also allow self-financing enterprise.

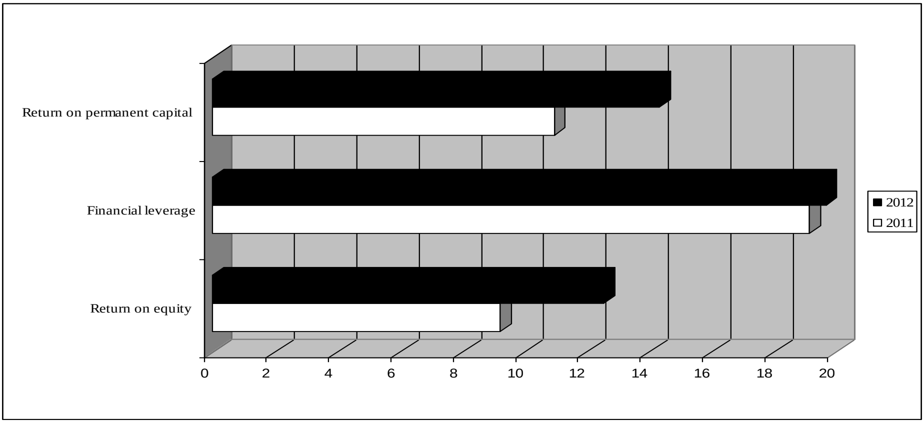
Return on equity provides information on the share of remuneration of the investments made by the company shareholders.

This rate is an extremely important indicator especially in assessing the company’s financial position in the market, and increasing remuneration of invested capital provides a greater opportunity to access financial resources due to the trust owners in reinvesting in the business and as well as to the possibility of attracting new investors.

Another indicator considered in this research is leverage. It represents the global leverage ratio calculated as the ratio between total debt and equity, which is very important for managers and creditors because it reflects the degree of financial independence and the ability of the company to use new loans.

The first company which is part of the case study is Biofarm SA, one of the largest drug manufacturers in Romania. In the chart below one can see the evolution of the indicators analyzed in this researc

Figure 1: Evolution of indicators analyzed for the period 2011-2012 for Biofarm



Source: authors' compilation based on data available at www.bvb.ro

The values of financial leverage range within appropriate limits even though it increases from year to year by 0.5%. This indicator increased from 19.16% in 2011 to 19.69% in 2012, its value being below 50%, which indicates that Biofarm does not depend largely on its creditors and can repay debts on the due dates agreed.

Share of the debts in the equity in the two years analyzed is below 20%, which indicates that the company has high financial autonomy to cover liabilities from equity.

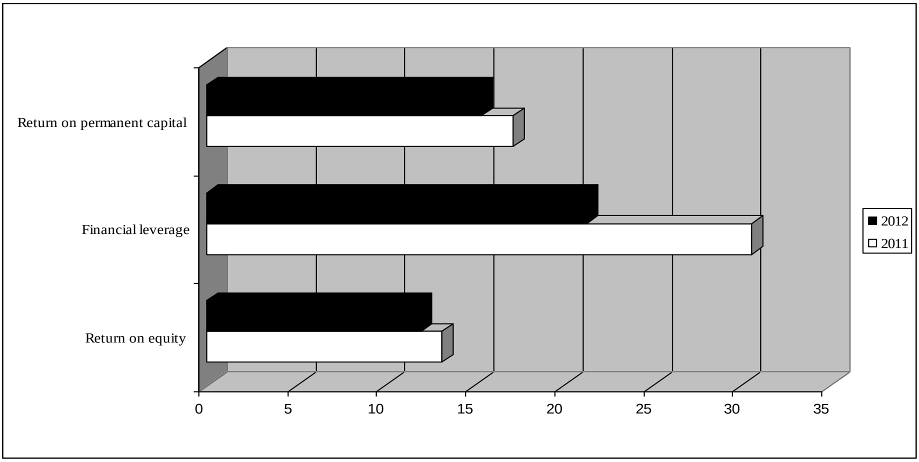
Return on equity increased from 9.24% in 2011 to 12.56% in 2012, which highlights the ability of capital invested to generate income, highlights the ability of equity to create value. It can be thus observed an increase in the share of debt to equity, simultaneously with the increase in profits on equity, which shows an increase in profitability, due to the company's borrowed capital.

The rate of return on permanent capital increases from 10.99% in 2011 to 14.35% in 2012, which indicates that the company has found new capital in the financial market to finance growth.

Another company that is part of the case study, but also among the best pharmaceutical companies in Romania is Zentiva SA.

The evolution of the financial leverage, the rate of return on equity and return on permanent capital in the period 2011-2012 is presented in the chart number two.

Figure 2: Evolution of indicators analyzed for the period 2011-2012 for Zentiva



Source: authors' compilation based on data available at www.bvb.ro

Reducing financial leverage from year to year has reduced the favorable effect of the presence of the rate of return on financial debt which was mainly due to decline in the share of total debt and increasing share of equity.

Leverage decreases from one period to another, from 30.59% in 2011 to 21.39% in 2012, which indicates a decrease in the debt to equity. The degree of financial autonomy is high in company Zentiva.

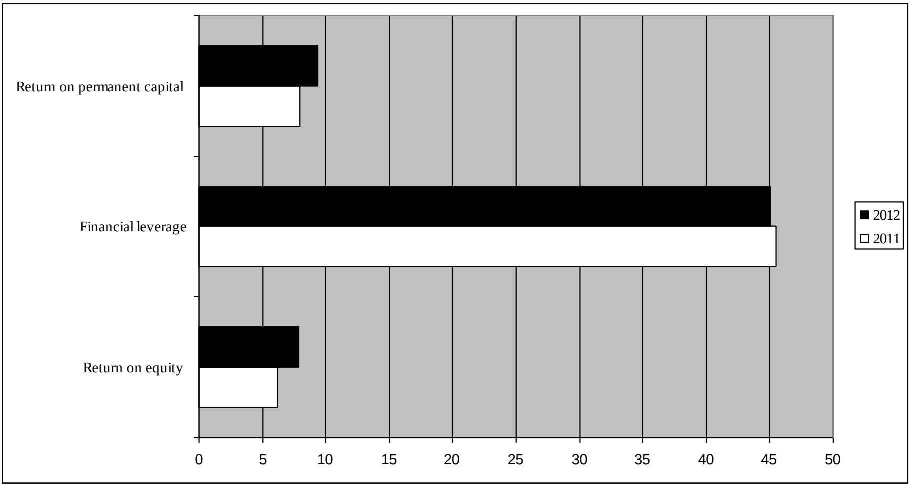
Financial rate of return decreases from 13.21% in 2011 to 12.01% in 2012, which shows a decrease in the ability of invested capital to generate revenue.

Moreover, in the two years analyzed permanent capital return rate (over 15% in the two years analyzed) is higher than the rate of financial return, which indicates better pay equity versus debt pay. This is due first and foremost to the change in the financing structure by reducing long-term debt and encouraging short-term debt.

The last company is analyzed is Antibiotice SA, one of the major companies in Romania, but which does not hold a leading position among the leading companies in the pharmaceutical market.

The evolution of the indicators analyzed is highlighted in the graph number three.

Figure 3: Evolution of indicators for the period 2011-2012 for Antibiotice



Source: authors' compilation based on data available at www.bvb.ro

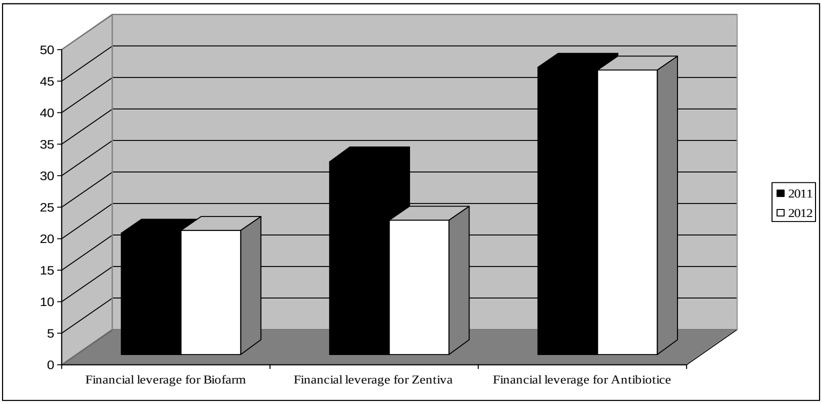
The values of financial leverage range within appropriate limits even though it recorded the highest values of all three companies analyzed from 45.53% in 2011 to 45.05% in 2012.

The high proportion of debt to equity in the two years analyzed led to an increase in the rate of financial return from 6.19% to 7.90%, which highlights the capacity of invested capital to generate income, thus underlining the ability of equity to create a surplus.

The rate of return on permanent capital increased from 7.91% in 2011 to 9.34% in 2012, which indicates that the company has found new capital in the financial market to finance growth.

In the graph below, one can see the evolution of the financial leverage for the companies analyzed.

Figure 4: Evolution of financial leverage for the period 2011-2012 for the companies analyzed

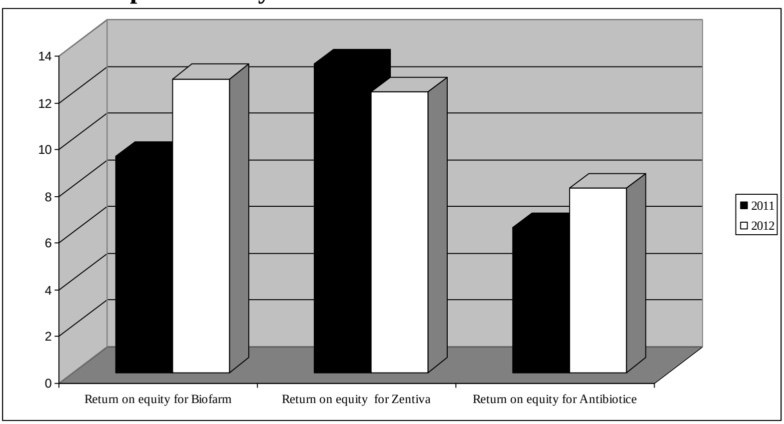


Source: authors' compilation based on data available at www.bvb.ro

Based on this analysis, it can be said that all three firms do not face a higher financial risk, which means that the share of debt to equity is below 50%

In the chart below, one can see the evolution of the rate of return on equity for the companies from the research.

Figure 5: Evolution of the rate of return on equity for the period 2011-2012 for the companies analyzed



(Source: authors' compilation based on data available at www.bvb.ro)

The company which recorded the highest growth rate of financial return was Biofarm followed by Zentiva and Antibiotice. The only company which recorded a decrease was Zentiva which shows a decrease in the capacity to generate incomes.

The others two companies had an increase in this rate from 2011 to 2012, which highlights the ability of capital invested to generate income, highlights the ability of equity to create value.

4. Conclusions

More and more industries were affected by the appearance of the financial crisis. One of the few industries that have maintained an upward trend is the pharmaceutical industry.

Economic development will not lead to the suppression of the economic and financial crisis, and no matter how much world economies will grow, they may collapse at the slightest shock wave of the crisis (G. Gorton, 2012). Yet using the appropriate tools and combining the art of strategic management with the art of financial management, one can do away with the classical pattern and keep constant or even evolve in adverse economic conditions.

An assessment of the financial statements that is as accurate as possible requires the use of instruments measuring results capable of showing the economic and financial reality of a company’s activities on the basis of the balance sheet, which is the mirror of any company’s financial statements (Berman, K. 2011).

This research shows the power of the pharmaceutical industry. Reducing financial leverage from year to year for the company Zentiva, has reduced the favorable effect of the presence of the rate of return on financial debt which was mainly due to decline in the share of total debt and increasing share of equity. The others companies have maintained from year to year approximately the same level of the financial leverage which hasn’t had a great impact in the rate of return of equity.

The analysis of financial risk is extremely important during times of economic instability and beyond, which is why our case study nuanced the fact that even in adverse conditions the pharmaceutical industry has kept the added value it had compared to most of the existing industries.

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