# STUDY REGARDING THE DETERMINATION OF THE FINANCIAL PERFORMANCE OF A COMPANY THROUGH MARKET RATES 

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#### Abstract

Determining the financial performance of an enterprise is necessary when making the decision to invest, which represents the proper selection of securities and the appropriate moment to enter on the market, meaning the time to purchase the securities. The study's objective is to define, determinate and interpret the market rates, that are used in financial analysis in order to measure the company's performance. The study, conducted on a romanian company listed on the Bucharest Stock Exchange, leads to the conclusion that because of the financial crisis, the compnay's financial performance was significantly affected.


Keywords: financial performance, financial analysis, market rates, securities.
JEL classification: E44, G14.

## 1. Introduction

Performance indicators are extremely important in order to perform an efficient management and they are also fundamental for making decisions that aim to achieve satisfactory economic results. The main users of the results provided by the financial analysis are: current and potential investors, creditors, managers, suppliers, customers, the company's employees, the authorities and the public.
The research is particularly important if we consider the evolution of the global financial crisis that started in august 2007 in the United States and that still affects all the sectors of the international economic life. Currently, financial markets face many difficulties that can have an overwhelming influence on the companies performance. As a result, the crisis effects increased the need for managers to pay more attention when assessing the company's financial performance.
The financial assesment of shares is based on financial indicators, of which the most important are the market rates of the shares. Determining the market rates is necessary when calculating the intrinsic value of the shares, ie the theoretical course at which the analyst should refer when is estimating the market level for financial assets.

## 2. Research methodology

Market rates represent the most appropriate method to measure the company's performance because they reflect the aggregate influence of both risk and rentability rates. The most important market rates are:

### 2.1. Market capitalization - Mc

Represents the market value of the social capital of a corporation and it is determinated as product between the market value of the shares and the total number of shares issued by the company.

$$
\mathrm{Mc}=\mathrm{Mvs}^{*} \mathrm{Ns}
$$

where: Mvs - the market value of the share
Ns - the number of shares issued by the company
The market value is determinated by the relationship between the supply and the demand for that financial title and highlights the investors expectations regarding the title's performance.

### 2.2. Earnings per share - EPS

Reflects the issuer's ability to obtain profit and it is determinated as the ratio between the net profit and the number of shares issued by the company.

$$
\mathrm{EPS}=\frac{\mathrm{Net} \mathrm{pf}}{\mathrm{Ns}}
$$

where: Net pf - net profit
Earnings per share is largely considered to be the most important element for calculating the price of the share. The main disadvantages of this indicator are the variation in the number of the company's shares and the inability to highlight treasury performance.

### 2.3. Dividend per share - Dps

Represents for the holder of the share, the income generated by its investment. It is determinated as the ratio between the value of the dividends paid by the company from the net profit of the financial year and the number of shares issued by the company.

$$
\mathrm{Dps}=\frac{\text { Dnet }}{\mathrm{Ns}^{*}} 100
$$

where: Dps - dividend per share
Dnet - net dividend

### 2.4. Dividend Yield - Dy

This indicator calculates the earnings obtained by the shareholders from the investment in the company's shares, so for them it is preferable to have a dividend
yield as high as possible. The indicator is calculated as the ratio between the dividend per share and the market value of the share.

$$
\mathrm{Dy}=\frac{\mathrm{Dps}}{\mathrm{Mvs}} * 100
$$

### 2.5. The rate of dividend distribution (Ddiv)

This indicator is determining how much from the net profit of the financial year is distributed to shareholders as dividends. The value of the indicator depends on the decision regarding the profit distribution. Its value is significant especially for the investors who are seeking to achieve high and reliable dividends.

$$
\operatorname{Ddiv}=\frac{\text { Dnet }}{\text { Net pf }} * 100
$$

where: Dnet - net dividend

### 2.6. Price Multiples

These exchange rates are determinated using the stock price and a number of different elements that can be obtained from the financial statements, enabling comparisons between companies in the same sector of activity and also dynamic comparisons.

### 2.6.1. Price to earning ratio - PER

Represents the ratio between the market value of the share (Mvs) and earnings per share (EPS).

$$
\text { PER }=\frac{\text { Mvs }}{\text { EPS }}
$$

Price to earning ratio indicates the time needed by an investor to recover its initial investment and also shows how much the investor must pay to obtain a monetary unit from the company's profit. In a static approach it is normal that a share with a low PER and possibly underestimated be preferred by the investor to one with a high PER and possibly overvalued, but the current profit brought by the share can be very different from its future profits. Therefore, it is possible that the share with a higher PER to be more profitable than the share with a lower PER, if there is a possibility that the profits and the dividends to grow rapidly in future. As a conclusion, the PER analysis must also consider the evolution of the share's revenues in the future.

### 2.6.2. Price to book ratio - PBR

This indicator is widely used on the capital markets and is calculating the value that the market brings to the company's management and organization, these elements being factors that contribute to the business growth. A company with an efficient management will have a market value higher than the historical value of its assets.

$$
\operatorname{PBR}=\frac{\mathrm{Mvs}}{\mathbf{B v}} \quad \mathrm{Bv}=\frac{\mathrm{E}}{\mathbf{N s}}
$$

Where: Bv - the book value of the share
E - the equity
The book value is calculated as ratio between the equity of the company and the total number of shares issued by it. Financial analysts believe that the shares of a company with a low PBR represents an un-risky investment because the book value is a level that "supports" the market value. The analysts who support this view say that while the other indicators remain the same, it is safer a share with a lower PBR.
It is necessary to highlight the relationship between price to earning ratio (PER), price to book ratio (PBR) and the return on equity (ROE):

$$
\text { ROE }=\frac{\text { Net profit }}{\text { Equity }}=\frac{\text { Net profit }}{\text { Net asset }}=\frac{\text { The market value }}{\text { Net asset }}: \frac{\text { The market value }}{\text { Net profit }}=\frac{P E R}{P B R}
$$

This indicator is determinated as ratio between the net profit and the equity of the company. ROE is considering the balance sheet and represents a good indicator to measure the financial performance. The main disadvantages of this indicator are: the influence of the accounting policies on equity and the possibility to adjust the accounting data. Also, ROE disregards the financing risk.

### 2.6.3. Price-to-Sales Ratio

Price-to-Sales Ratio is determinated by the ratio between the market value of the share and the annual sales per share. The indicator is used since 1980's due to its importance in identifying the overvalued shares. The basic principle of this indicator is that, as the PSR is lower, is more unlikely that the share be overstated. The analysts who use it say it is especially useful in evaluating the shares of the companies with small profits or unprofitable, because in their case PER does not provide significant meanings.

$$
\mathrm{PSR}=\frac{\frac{\mathrm{Mvs}}{\mathrm{CA}}}{\overline{\mathrm{Ns}}}
$$

where: CA - the turnover

## 3. Discussions

Empirical research regarding the evolution of the financial performance of a romanian company listed on Bucharest Stock Exchange on the period 20072013

The analyzed company is S.C. Transilvania Construcții S.A. and it is one of the most successful in the construction market in Cluj. The company's activity is to provide construction services for residential and non-residential buildings, NACE code 4120. SC Transilvania Construcții S.A. has the largest logistic park in ClujNapoca, 36 stores and 6 halls.
The company is listed on the Bucharest Stock Exchange since 2008, at the second category, and has a subscribed capital of 31.211 .499 lei. Its capital is divided into 945.803 common shares, with a nominal value of 33 lei per share. The net profit obtained by the company in 2013 was 2.701 .287 lei, $25.26 \%$ higher than in 2012. The turnover was 29.103 .730 lei, $22 \%$ less than last year.
During 2013 there was a staff restructuring in the company, and the number of employees reached 71 from 125 as it was in 2012. The stuff was reduced because of the company's orientation to activities that don't require a large number of employees, such as apartments sales and rental space.
The study's objective is to determine and interpret the indicators:

### 3.1. Market capitalization (Mc)

It can be noticed that after the beginning of the global financial crisis, in 2008, the market capitalization of the analyzed company decreases significantly compared to 2007, because of the reduction of the market value of the shares. In 2009 and 2010, the market capitalization has very similar values and higher than in 2008. In 2011, the indicator's value is higher with $58 \%$ than it was in 2010 , due to the increase of the market value of the shares and of the number of traded shares. In 2012, the market capitalization decreases slightly from 2011, but it increases to $43 \%$ in 2013.

Figure nr.1. Mc evolution in 2007-2013


The source: Own processing of the data provided by the portal www.bvb.ro- S.C. Transilvania Construcții S.A. company

### 3.2. Earnings per share - EPS

According to the figure below, it can be noticed that in 2007, EPS has a relatively high value, about 15.94 lei. In the next three years, because of the significant reduction of net profit, there is a radical reduction of EPS, which reaches a value of 0.47 lei in 2010. Since 2011 until 2013 there is a slight increase of the indicator, which reaches 2.86 lei in 2013.

Figure nr.2. EPS evolution in 2007-2013


The source: Own processing of the data provided by the portal www.bvb.ro- S.C. Transilvania Construcții S.A. company

### 3.3. Dividend per share - Dps

In 2007, the dividend per share was 504 lei, but until 2013 there were no longer distributed dividends. In 2013, the dividend per share was 103 lei.

Figure nr.3. Dps evolution in 2007-2013


The source: Own processing of the data provided by the portal www.bvb.ro- S.C. Transilvania Construcții S.A. company

### 3.4. Dividend Yield - Dy

In 2007 the dividend yield at the analyzed company was 1229 lei. Since 2008 until 2012, the company didn't distributed dividends, so there was no dividend yield. The next year, the dividend yield was 173 lei.

Figure nr.4. Rdiv evolution in 2007-2013


The source: Own processing of the data provided by the portal www.bvb.ro- S.C. Transilvania Construcții S.A. company

### 3.5. The rate of dividend distribution (Ddiv)

In 2007, $32 \%$ from the net profit of the company was distributed as dividends. The next five years, the company didn't distributed dividends to shareholders, which shows its concern to ensure self-financing by reinvesting the profits. In 2013, 36\% of the net profit was distributed to shareholders.

Figure nr.5. Ddiv evolution in 2007-2013


The source: Own processing of the data provided by the portal www.bvb.ro- S.C.
Transilvania Construcții S.A. company

### 3.6. Price Multiples

### 3.6.1. Price to earning ratio - PER

It can be noticed that in the first three years, the indicator has values below 10 , which means that the society's shares are undervalued. In 2009, 2010 and 2011, PER has high values, respectively $69.07,64.89$ and 31.39 , which shows a very strong overvaluation of the company's shares. In 2012 and 2013, the shares have reasonable prices.

Figure nr.6. PER evolution in 2007-2013


The source: Own processing of the data provided by the portal www.bvb.ro- S.C.
Transilvania Constructiii S.A. company

### 3.6.2. Price to book ratio - PBR

In 2007, PBR is higher than a unit, which shows that the society has an efficient organizational structure. In 2008 there is a strong decrease of the indicator, and even if until 2013, PBR follows an uptrend, it has values between 0.11 and 0.4 ,
specific values for a period of recession with low earning opportunities. In conclusion, PBR's values depend not only on the factors related to the company in question, such as the management quality, but also depend on macroeconomic factors.

Figure nr.7. PBR evolution in 2007-2013


The source: Own processing of the data provided by the portal www.bvb.ro- S.C.
Transilvania Constructii S.A. company

### 3.6.3. Price-to-Sales Ratio - PSR

The indicator has the lowest value in 2008, nearly half compared to 2007 , then it is in a continuous increase until the end of the analyzed period, which means that the company's shares were undervalued in the period before the crisis.

Figure nr.8. PSR evolution in 2006-2013


The source: Own processing of the data provided by the portal www.bvb.ro- S.C.
Transilvania Constructiii S.A. company

## 4. Results

The main advantage of determining the market rates of shares lies in the calculations simplicity and in the fact that it is not necessary to predict the future results. The evaluation of the company's performance is required in order to achieve better economic results. The analysis of the stock returns supposes the determination and the interpretation of the most important stock indicators, ie market rates. All the indicators that are used have both advantages and
disadvantages. The company's performance is not highlighted better by one or another of the exposed indicators.
The study was conducted on a romanian company listed on the Bucharest Stock Exchange for a period of seven years, ie from 2007 to 2013. The selected period proved to be a representative one, because it includes both a pre-crisis period and the period that followed the crisis. The analysis leads to the conclusion that since 2008, the financial performance of the company has been significantly reduced, the main reason being the reduction of profit. If before the crisis, in 2007, the value of the determinated indicators was attractive to investors, since 2008, because of the global financial crisis, the value of the indicators that measure the financial performance of the company has been significantly affected.

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