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**Evaluating the Performance of the Enterprise
in the Telecommunications Sector
and the Impact of R&D on Profitability**

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Abstract

In this paper, we have pursued the measurement of the financial performance in the telecommunications sector, namely a direct approach towards Digi Telecommunications Group.

This paperwork examines empirically three groups of indicators: the rates of return on invested capitals, the liquidity and the indicators of profitability. Due to the high degree of validity in its capacity to analyse and measure various aspects of the financial health of a company, the analysis of the financial report was realised using the data provided by the Bucharest Stock Exchange through its annual reports and the Thomson Reuters Eikon platform. The rates of return on capitals are relevant indicators, much appreciated by the investors interested in analysing the financial performance of large companies. The relevant reports which reflect various aspects of the financial health of the company were analysed and compiled in order to arrive to a conclusion with respect to the financial situation of Digi Telecommunications Group. The results indicate a high level of return in 2017 compared with years 2018 and 2019, most likely indicating the strengthening of the company's capacity to control the costs while pursuing stronger profit margins. The liquidity slightly decreased for the four years under study. The analysis of the rates of return on capitals, of liquidity and profitability ratios clearly show a stable and broadly positive trend for the years 2016 to 2019, highlighting an improvement in the company's resource management and a positive outlook for the company and good news for the investors.

A long term improvement of the company's profit results is prompted by R&D projects, which constantly contribute to its sustainable development. The R&D programmes are not only key and basic components to development of science and technology; they also play an important role in developing and sustaining the growth of the national economy and corporate business. The R&D process is associated with investment, process which can be the one of the most critical determinants in boosting scientific and technological progress.

Keywords: financial performance, rates of return on capitals, R&D programmes, indicators of profitability.

JEL Classification: G20, G32

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1. Introduction

Changes and evolutions on the financial market should also be reflected in the financial management of enterprises, the adaptation of services and products to the requirements and needs of the market, regardless of the business segment.

The importance of the telecommunications system has been demonstrated, lately more than ever, by the need to ensure safe and high-quality services.

What we have pursued through this study is the determination of the most important financial indicators and the creation of a clear image for investors on the profitability of the Digi Telecommunication Group, company listed on the Bucharest Stock Exchange.

Digi Communications Group is a leading European operator in the field of electronic communications, with operations in Romania, Hungary, Spain and Italy. Depending on the number of fixed internet connections registered at the end of 2019, in Romania, Digi had a market share of 53%, Telekom Group 21%, the other providers totalling 26%³.

Continuous development in the telecommunications sector is related to R&D investments in new technologies and the improvement of services and the growth of the market segment.

The aim of this study is to highlight the results of key financial indicators, such as return on assets (ROA) and return on equity (ROE), liquidity and to reflect on the other indicators of financial profitability.

ROA - return on assets measures the efficiency of the capital allocated in the fixed assets and in the current assets of the enterprise. It does not consider the way capital is procured (own or borrowed) and is independent of the financing policy. For a better return on capital, it is important that this indicator is as high as possible. A financial manager must have other comparable market data to track the level of business efficiency, such as the inflation rate, the average rate of return on the business sector, the interest rate on deposits.

ROE - return on equity represents the efficiency of the use of the own capitals, it emphasizes the capacity of the enterprise to earn profit by using the own capitals at its disposal. The indicator shows the rate of return on capital invested by shareholders and/or associates. As with the return on assets, the manager or financial manager must consider the inflation rate, the average rate of return on the sector of activity, and the rate of interest on deposits.

Liquidity is a factor which has a very important role in the evaluation of financial performance (Bărbuță-Mișu, Madaleno, 2019)[2]. More than that, this hypothesis may be interpreted as the degree to which an asset can be at a time converted into cash, but here depending on the asset demand and supply. In this situation, we can say that liquidity risk is also one of the important causes of a financial crisis and we must consider it as an important factor in determining financial performance.

³ www.ancom.ro.

2. Problem Statement

The issue of knowing and measuring the financial performance of the enterprise is an essential element in assessing and improving economic efficiency. The evolution of the economic environment in recent decades has significantly changed the way we approach performance at the enterprise level, so that many theories in the field have been adapted to the new economic reality, and, in some cases, complemented by new complementary theories.

Many researchers (Bhargava, 2017) [4] analysed the financial statements of two information technology companies in India, WIPRO Ltd and INFOSYS Ltd, for five years, 2011-2012 and 2015-2016. Bhargava used several financial ratios to make a comparison between the two companies in relation to profitability and capital structure. The result of his analysis showed a significant difference of the ratios used between the two companies.

Another study (Bansal, 2015) [1] assured the finance and accounting performance of leading IT Indian companies for the period 2010-2014. Bansal analysed the financial statements of four IT companies, namely TATA CONSULTING SERVICES, WIPRO Ltd, INFOSYS Ltd, and TECH MAHINDRA Ltd. The analysis was conducted for five years, to compare the measurements of liquidity, profitability, market performance, solvency, and leverage levels. He concluded that Infosys Ltd is the most sought-after company for investors. Along similar lines is Tata Consulting Services, whose working capital turnover, total asset turnover and DuPont analysis returns show encouraging signs for shareholders who have profits as their point of consideration.

A study on Indian Telecom Companies (Pandey et al., 2013) [9] analysed the financial statements of the four telecom companies in India, BSNL, RELANCE, AIRTEL, and MTNL. Four financial ratios have been analysed and used, current ratio, fixed assets to total turnover, debt to equity ratio and return on equity ratio to assess if there is a difference in this group of companies. The authors used ANOVA analysis to test the data for five years, from 2008 to 2012. The results of their analysis reveal a significant difference of the above ratios between the companies under study.

Other studies (Santos and Brito, 2012) [11] and (Selvam et al., 2016) [12] agreed to represent that firm performance was a subset of the dimension consisting of the unidimensional or multi-dimensional indicator. The domain includes from the overall financial indicator (profitability, market value, and growth) to the social indicator (employee and customer satisfaction, environmental and environmental audit performance, corporate governance performance, and social performance). Some studies (Karabag and Berggren, 2014) [7] researched how the impact of firm strategy and also industry structure as well as business group membership and state support can influence firm performance in Turkey; in this research, they use a data set compiled from the largest manufacturing firms. The conclusions of the study highlighted that industry structure and business group membership were the strongest determinants of firm performance. Other study (Saleem and Rehman, 2011)[10], applied a linear regression model to determine the correlation between

the liquidity and profitability indicator, and the empirical results of the study confirmed that there exist an important control of liquid ratio on ROA whereas there is an insignificant effect on ROE indicator. In his study, (Bărbuță-Mișu et al., 2019)[3] analyse what are the possible factors able to influence the financial performance level, in firms of the European Union, given the crisis period effect. They presented the risk factors capable to affect asset values and firms' financial performance, but in the paper, they have been highlighting the following factors: borrowed capital repayment and labour productivity, leverage, solvency, asset turnover, liquidity as representing indicators that are affected by a potential financial crisis.

Also, various studies show either poor or no statistical relation between capital structure and performance firm (Ebaid, 2009)[5]. Ebaid investigates the impact of capital structure choice on the performance of 64 firms in the Egyptian capital market. He uses the following accounting measures: ROA, ROE, gross profit margin, and concludes that capital structure choices, generally, have a weak-to-no impact on firm return.

Researcher (Al-Taani, 2013) [8] used the data of 45 manufacturing companies which are listed on the Amman Stock Exchange. Multiple regression analysis was applied on performance indicators such as: ROA and Profit Margin as well as Short-term debt to Total assets, Total debt to Equity and Long-term debt to Total assets, as capital structure variables. The results show that there is a negative and insignificant relationship between short-term debt to total assets and long-term debt to total asset, also ROA and PM. The results of the study show that statistically, capital structure of the firms is not a major determinant of their performance. The conclusion highlights that managers of manufacturing firms should exercise caution while choosing the amount of debt to use in their capital structure as it affects their performance negatively.

3. Research Questions / Aims of the Research

In support of investment decisions, the financial information provided by the company is vital. Thus, the financial health is followed by both the company's managers and shareholders (Ibrahim, 2019) [6].

In respect of current shareholders, it can provide important and revealing insight regarding the following questions: should they buy more common or preferred stocks or should they sell some of their currently owned shares? Financial results help in responding to these questions by assessing the calculated risk and anticipated return from acquiring shares in the two distinct stock options, regardless of whether they are common or preferred. This information is also useful for potential investors as it helps guide them towards buying stocks that best fit the levels of risk and return that they are most comfortable with. The financial results help the managers in comparing the financial situation of the company with that of their competitors on the market. At the same time, the suppliers and lenders also rely on the financial accounting information. Suppliers need to make an accurate judgment regarding the ability of their clients in order to negotiate better

contractual terms and conditions in relation to credit and payment for their goods and services. In turn, lenders require financial information from their clients to help them assess the financial position of the company that they are lending capital to. Furthermore, researchers and financial analysts are interested in consulting the financial accounting data in order to identify both the current developments and the trends in the performance of the corporation or the industry. For example, one can easily visualize the profit growth movement by conducting a type of analysis known as time-series analysis. Additionally, the analysts find the financial accounting information very valuable as it allows them to investigate structural and performance commonalities between industry competitors and to perform cross sectional analysis between two or more industry players.

4. Research Methods

The sources of the data and financial information were obtained from the financial reports of Digi Telecommunications Group, as well as from the platform Thomson Reuters. The data collected through these sources was analysed and used in determining financial indicators, such as indicators of profitability, liquidity and capital structure. The indicators were calculated over a period of four years, 2016-2019.

Table 1. Variable description

Description	Abbreviation	Calculation
<i>Profitability</i>		
Gross Margin	Gross Margin	Gross Profit/Revenue*100
EBITDA Margin	EBITDA Margin	EBITDA/Total Revenue*100
Operating Margin	Op.Margin	Operating profit/Total Revenue*100
Pretax Margin	Pretax Margin	Pretax Income/Revenue*100
Effective Tax Rate	Effective Tax Rate	Income Tax/Pretax Income*100
Net Margin	Net Margin	Income After Tax/Total Revenue*100
Return on Equity	ROE	Net income /Average total Equity*100
Return on Assets	ROA	Income After Tax/Avr. Total Assets*100
Return on invested capital	ROIC	Income After Tax/Avg LT Capital
<i>Liquidity</i>		
Quick Ratio	Quick Ratio	Current Assets*Inventory/Current Liabilities
Current Ratio	Current Ratio	Current Assets/Current Liabilities
Times Interest Earned	TIE	EBIT/Interest Expense
Cash Cycle (Days)	Cash Cycle (Days)	Average Inventory - Avg A/P Days/Avg. A/P Days

Source: Authors' development based on data from Thomson Reuters platform

5. Findings

The determination of the main financial indicators of Digi Telecommunications Group will be presented below. The results indicate a high level of return (ROE and ROA) in 2017 compared to years 2018 and 2019. The return on invested capital (ROIC) represents the performance of the exploitation of the entire economic asset of the company, reporting the total profit obtained to the entire economic asset. This indicator related to the inflation rate is higher, which allows the company to recover its investments.

Table 2. Profitability indicators

<i>Profitability</i>	2016	2017	2018	2019
Gross Margin	93.1%	96.2%	95.9%	97.1%
EBITDA Margin	29.7%	31.3%	30.3%	37.4%
Operating Margin	9.4%	12.6%	9.9%	12.2%
Pretax Margin	2.7%	8.7%	3.8%	5.2%
Effective Tax Rate	49.0%	21.9%	52.2%	33.6%
Net Margin	1.4%	6.8%	1.8%	3.4%
ROE	-	65.6%	12.5%	24.6%
ROA	-	4.81%	1.28%	2.28%
ROIC	-	7.5%	2.1%	3.7%

Source: Authors' development based on data from Thomson Reuters platform

In Table 2, we presented the results of profitability indicators from 2016 to 2019, thus highlighting their evolution over time. According to the first result, it is obvious that the company had a high profitability in 2017, the Return on Equity (ROE) was 65.6% compared to 2018 when it registered 12.5%, and a slight increase in 2019 where it registered 24.6%. The same evolutions are represented by the Return on Assets (ROA), more precisely 4.81% in 2017, the highest value recorded in the years studied followed by a decline in 2018, 1.28% and an increase in 2019 where ROA was 2.28%. A favourable result was also recorded and ROIC in 2017, 7.5%.

Through ROA, we have ensured the efficiency of the capitals allocated in the fixed assets and current assets of the company, but this does not consider the way of procuring the own capitals (own or borrowed) and is independent of the financing policy. On the other hand, ROE is represented by high values; it validates the capacity of the enterprise to make a profit by using its own capital, because the results presented are well above the current inflation rate or the interest rate on deposit.

Table 3. Liquidity indicators

<i>Liquidity</i>	2016	2017	2018	2019
Quick Ratio	0.40	0.36	0.28	0.29
Current Ratio	0.44	0.38	0.31	0.31
Times Interest Earned	1.8	3.2	2.2	2.4
Cash Cycle (Days)	-	(3,662.6)	(3,400.0)	(4,698.9)

Source: Authors' development based on data from Thomson Reuters platform

Table 3 shows the analysis of liquidity indicators, quick ratio, current ratio, times interest earned and cash cycle. The current ratio measures a company's ability to pay current or short-term liabilities with its current or short-term assets. In the four years studied, the result of the indicator was below 1, the highest value being 0.44 in 2016. In this situation, creditors would consider the company a financial risk because it might not be able to easily pay down its short-term obligations. The quick ratio also measures the liquidity of a company by measuring how well its current assets could cover its current liabilities. However, the quick ratio is a more conservative measure of liquidity because it doesn't include all the items used in the current ratio. Similar to the current ratio, this indicator is below 1, which could create difficulties in the company's ability to pay its debts in the short-term.

6. Conclusions

The goal of this paper was to measure the financial performance of Digi Telecommunications Group. The research was focused on analysing the performance indicators: the rates of return on capitals, the liquidity and the indicators of profitability. The results showed a high performance of the company in the studied period, especially in 2017 when ROE was 65.6%, ROA 4.81% and ROIC 7.5%.

On the other hand, the liquidity indicators registered a low coefficient, which can create difficulties in case of short-term payments, and this may reduce confidence to partners or suppliers.

Liquidity risk is also considered one of the major causes of financial crises of the company and should thus be considered by economists as an important factor in financial performance and profitability. A high liquidity shows the financial force of the firm and in the literature we found a significant positive relationship between liquidity variables (quick ratio, current ratio) and the profitability of the firm.

Based on the results and information presented, the study can continue at a larger scale, at the level of the entire sector and in making a comparison at the level of EU companies.

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