

STOCK MARKET PERFORMANCE ANALYSIS OF PHARMACEUTICAL, IT AND AUTOMOTIVE COMPANIES FROM POLAND

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Abstract: *The pharmaceutical, IT and automotive sectors were chosen for the analysis based on their continuous growth and intense development in the Polish regions during the recent years. Performance represent the key element to stay on the market, therefore, evaluating performance is of high importance for the management, shareholders and trading partners. The study focuses on analyzing the financial statements and the evolution between years 2009 and 2018 of the companies from the mentioned sector listed on the Warsaw Stock Exchange (WSE). Performance was analyzed using the main stock market indicators such as Return on Assets, Return on Equity and Price to Earnings Ratio, considered significant for the study in order to generate conclusions for the decision makers. The study has reached its objectives by providing significant information regarding the performance, evolution and ranking of the analyzed companies, facilitating future investment decisions.*

Keywords: *Warsaw Stock Exchange; stock market performance; pharmaceutical; IT; automotive; stock market indicators.*

JEL Classification: *L10; L62; L65; L86.*

1. Introduction

The Warsaw Stock Exchange (WSE) is the largest stock exchange of financial instruments in Central and Eastern Europe (CEE) and one of the most recognized Polish financial institutions. Located in Warsaw, Poland, the WSE began trading on April 16, 1991. It operates markets in stocks and bonds of nearly five hundred domestic and international issuers. It also trades in derivatives (futures, options, index units) and structured instruments and operates a commodity market including one of the most liquid electricity markets in Europe.

On September 22, 2018, the FTSE Russell and STOXX index agencies reclassified the Polish capital market to Developed Market status. Poland was the first country in the last decade to be promoted from the Emerging Market status, joining the 25 advanced global economies, a list which includes the US, UK, Germany, France, Japan and Australia, obtaining the enviable title of the fastest growing in the group. The upgrade of Poland to developed market status represents an acknowledgement of the progress of the Polish economy and capital markets. Poland has all the features of a developed market, including secure trading and post-trade services, as well as advanced infrastructure.

Poland is currently the 6th largest economy in the European Union and is a modern diversified economy. It has been assigned a stable and favorable outlook by S&P

(Standard & Poor's Global Rating) for this reason as well as its highly educated workforce, manageable levels of public/private debt and continuous increase in tax collection efficiency. Ranked 38th in the annual IMD World Competitiveness Rankings in 2019, Poland has positioned itself as a fast growing and secure investment market.

According to the reports published on the Warsaw Stock Exchange website, the capitalization for 2019 was 259 million euros, and according to the statistical data published by the Federation of European Securities Exchanges (FESE), the turnover for 2019 was 44,9 billion euros.

2. Literature review

Profitability represents the economic justification of the existence and sustainability of any company. Finance specialists agree that capital maximization, represented by the equity value, is the main objective for which the management must strive to achieve. (Besley, Brigham, 2008).

The authors M. Achim and S. Borlea (2012), define the concept of performance from the point of view of the existing links between the company and the stakeholders. Therefore, these two authors consider performance as the ability of the company to create added value for stakeholders, to meet the demands of consumers and employees, and more recently the concern for protecting the environment.

Managers have a decisive influence on the development and performance of companies, but their actions should serve the interests of shareholders. (Ardeleanu Popa Carmen, Cărmăciu Diana, 2009). The financing option, meaning the choice between internal and external sources, is considered one of the most important decisions, with a direct impact on the performance. (Zeitun & Tian, 2007).

The companies' performance and the complex activity of the stock market are expressed through a system of indicators which quantify quantitatively and qualitatively the number of transactions and the impact of the supply and demand of the financial instruments. These indicators serve an important role to the investors, their evolution being taken into account in the investment process. (Sabău-Popa C. D., Zăpodeanu D., 2008).

The profit and performance of the company wins customers' trust (Neacșu, 2015). Company performance can be measured by profitability rates, such as ROA and ROE. (Delcea, Cofas Bradea, Scarlat, Mărăcine, 2013).

Deari and Dincă (2015) have analyzed the financial performance of 40 selected Romanian companies for the 2009-2013 period. They found that the companies with higher current to total assets ratio have higher assets turnover and return on assets. Jatoi (2014) analyzed the relationship between earnings per share and the evolution of share prices for 13 cement companies listed on the Karachi Stock Exchange for the period 2009-2013. The study included the market price of shares as a dependent variable, and earnings per share and return on assets as independent variables. The results led to the following conclusion: earnings per share has a significant impact on the market value of the shares for the companies analyzed.

The correlations between the opportunities of making investments, the source of financing and the dividend distribution policy are analyzed by Abor and Bokpin

(2010). Authors note the major influence of investments over the results sharing policy. Companies with a high potential for investment will distribute dividends in a small proportion, motivating the retention of resources for further development.

3. Study objectives and methodology

The study's objective is to analyze performance achieved by the companies listed on the Warsaw Stock Exchange (WSE) in the pharmaceutical, IT and automotive sector, in order to establish the correlation between the financial performance and the stock market performance of these companies.

The efficient functioning of capital markets represents the foundation for the development of modern economy. Stock markets play a crucial role in the allocation of capital and its transformation from savings to financing of new investment initiatives, thus creating added value.

Based on the annual reports published for the period 2009-2018, the performance of the companies was analyzed by calculating a series of indicators. The results were compiled and compared in order to determine the evolution of each company.

4. Data analysis and discussion of results

For listed companies on the capital market, besides the traditional and modern performance indicators, there are also stock market indicators. Their role is to define the position of the company on the capital market.

I have chosen to analyze the companies from the pharmaceutical, IT and automotive sectors due to their intense development in recent years. According to articles published on the website of the Ministry of Entrepreneurship and Technology of Poland, major car manufacturers such as GM, Ford and Volkswagen are active in the automotive sector together with manufacturers of components or subassemblies. The analyzed companies from the automotive sector are: AC, British Automotive Holding, Debica, Intercars and Sanok Rubber Company.

As for the IT sector, ICT companies in western and northern Europe have ranked Poland as the "number one" destination in the CEE region, in terms of research and development projects mainly run by international software companies. The analyzed companies from the IT sector are: Ailleron, Asseco Business Solutions, Asseco Poland, Asseco South Eastern Europe, Atende, Betacom, Comarch and Comp.

Regarding the pharmaceutical sector, innovative companies are constantly extending their operations in Poland, by transferring or setting up medicine-producing branches. Also, the domestic companies are continuously developing their industrial operations, the key factors being the competitive manufacturing costs. The analyzed companies from the pharmaceutical sector are: Bioton, Celon Pharma, KRKA, Master Pharm, Pharmena, Cormay and Sopharma.

4.1. The turnover and the rate of financial stability

An indicator that measures the performance of companies, used as a criterion for ranking them in terms of their economic importance is the turnover. The turnover represents the value of sales made over a period of time by an entity.

Despite the large differences in value, the turnover showed an upward trend for all the pharmaceutical companies analyzed, which indicates an increasing demand on the market for the offered products. The highest values were registered by KRKA (1.010 mil € for 2018), followed by Sopharma (605 mil € for 2018), then by Bioton which showed big differences in turnover value over the years, continuously rising and dropping (92,1 mil € in 2017, 56 mil € in 2018). A major factor was the dissolution of the contract for the production and distribution of insulin on the Chinese market. The turnover for the IT sector has shown an upward trend for all companies, which denotes a growing demand on the market for the products and services offered. Biggest values were registered by Asseco Poland (2.173 mil € in 2018), Comarch (319 mil € in 2018), Comp (158 mil € in 2018) and Asseco SEE (156 mil € in 2018). For the automotive sector, the turnover has also shown an upward trend for all companies. The highest values were registered by Intercars (1.850 mil € for 2018), Debica (450 mil € for 2018) and Sanok Rubber Company (238 mil € for 2018). Regarding the financial stability ratio, almost all the companies in the pharmaceutical field have registered values over the recommended 50%. Bioton registered 39% in 2018 and Pharmena recorded values below the 50% limit starting with the year 2016. For the IT sector, the company with values below the recommended minimum is Atende, registering 39% in 2018. In the automotive field, British is the only one with values below the 50% limit, registering 40% in 2018.

4.2. The WIG index

For the following indicators, I will also take into account the evolution of the representative index for the Polish stock market, the WIG index. The index tracks the performance of all domestic companies (investment funds are excluded) listed on the main market of the WSE. The evolution of the index for the analyzed period is presented in the following figure:



Figure 1: WIG index between the years 2009-2018 (in PLN currency)

Source: <https://www.tradingview.com/symbols/GPW-WIG/>

The WIG stock market index has shown an upward trend during the presented years. However, decreases can be seen in 2011, 2016 and 2018. According to an article published on the Polish financial site strefainwestorow.pl (16.09.2019), the decrease occurred in 2011 was due to the PIIGS crisis (Portugal, Italy, Ireland, Greece and Spain) and the one in 2015 was caused by the annexation of Crimea to Russia. The reasons for the 2018 drop were mainly internal issues related to the crisis of confidence around the private IFIs caused by Getback.

4.3. Return on assets (ROA)

ROA is an indicator that shows how profitable a company is in relation to its total assets. ROA gives an manager, investor or analyst an idea of how efficient a company management is when using its assets to generate profit. Higher ROA indicates greater asset efficiency.

For the pharmaceutical companies, the evolution of the return on assets is presented in comparison with the evolution of the WIG index in the following figure:



Figure 2: The ROA of the producers of pharmaceutical products listed on WSE (%)
Source: Authors' elaboration based on data from the WSE website

For the companies that registered profit, ROA's trend was close to the WIG indicator's trend. The large companies such as KRKA and Sopharma had a steady trend with values close from year to year. The peak from 2014 for Celon Pharma is due to the sale of a package of shares which generated an additional and generous profit. According to the yearly reports, the increased profit from 2014 for Master Pharm comes from the sale of product licenses. In the case of Cormay, the negative result for 2018 comes from the reevaluation of the development expenses. Pharmena

mentions in its report from 2017 that the losses come from the increased competition in the dermatocosmetic market but also by the launch of new products. For the companies in the IT sector, the evolution of ROA is presented in figure number 3 below. In this case, the trend of ROA does follow the trend of the WIG index for companies such as Ailleron, Betacom and Comp. The highest values were registered by Asseco Business Solutions followed by Asseco South Eastern Europe. Out of the 3 Asseco companies, Business Solutions had the lowest turnover but the biggest ROA. Ailleron could have ranked on second place but due to investments in the construction of the international infrastructure in order to consolidate a global position, it registered a lower profit in 2018. Both Asseco SEE and Asseco Poland have had a relatively constant trend, with values close from year to year. The lowest ROA value in 2018 was registered by Comarch, which although made a smaller profit in 2018 due to significant investments in new and existing IT products, has consolidated its position as one of the fastest growing employers in the IT sector.

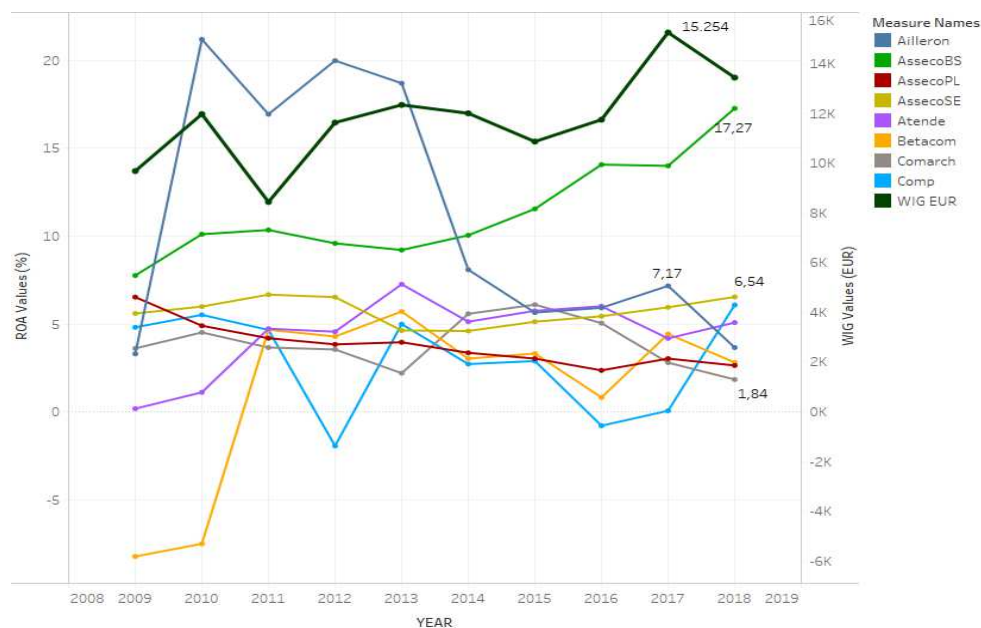


Figure 3: The return on assets of the IT companies listed on WSE (%)
Source: Authors' elaboration based on data from the WSE website

In the case of the automotive field, the trend of the return on assets closely follows the trend of the WIG index for most of the analyzed companies. The highest values were registered by AC each year, specialized in the sale of gas installations for cars. For 2018 it is specified in the reports that sales grew from exporting, but also domestically because of the record growth of imported used vehicles in Poland.

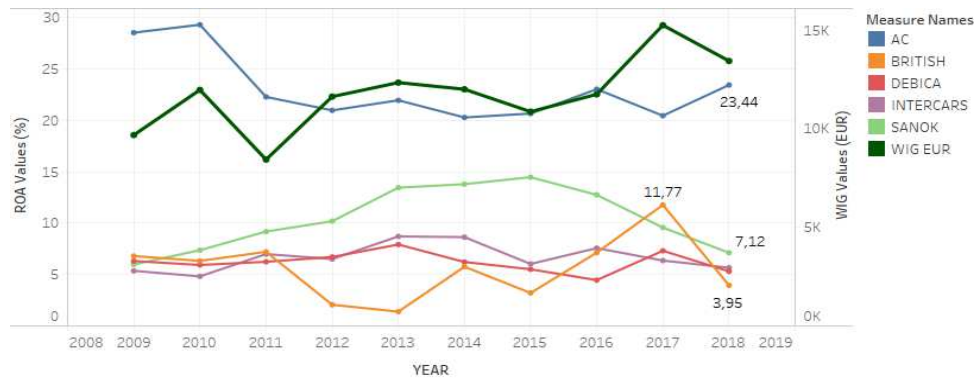


Figure 4: The return on assets of the automotive companies listed on WSE (%)
Source: Authors' elaboration based on data from the WSE website

On second place we have Sanok Rubber Company, which specifies in the reports that the reduced profit is due to the increase in costs with raw material and also costs with salaries. For British Automotive Holding, the key event of 2018 was the dissolution of the import agreement with the manufacturer, Jaguar Land Rover, British being the general importer of the group in Poland. The large companies like Inter Cars, being the largest distributor of spare parts for cars and Debica, being a manufacturer of tires had similar trends with no big oscillations during the years.

4.4. Return on equity (ROE)

Another indicator that expresses the ability of an economic entity to generate profit is the return on equity (ROE). ROE is a measure of financial performance calculated by dividing net income by shareholders' equity. The higher the return on equity is, the more financial resources the company has at its disposal (Vasilache, 2009). For the pharmaceutical companies, the evolution of the return on equity is presented in comparison with the evolution of the WIG index in the following figure:

Comparing ROA's evolution to ROE's evolution, we can see that all the companies have had the same trends in both cases, obviously with different values because of the equity difference. In this case, ROE's trends differs even more from the WIG index trend, implicitly it did not have a direct influence on the evolution of the results of the companies.

For the IT companies, the evolution of ROE is presented in figure number 6 below. The only major difference regarding the ROE is in the case of Atende, which ranked on second place since 2014, showing an upward trend. In 2018 the decrease of profit comes from lower sales in the telecommunications and media sectors. In this sector as well, ROE's trends differs even more from the WIG index trend.

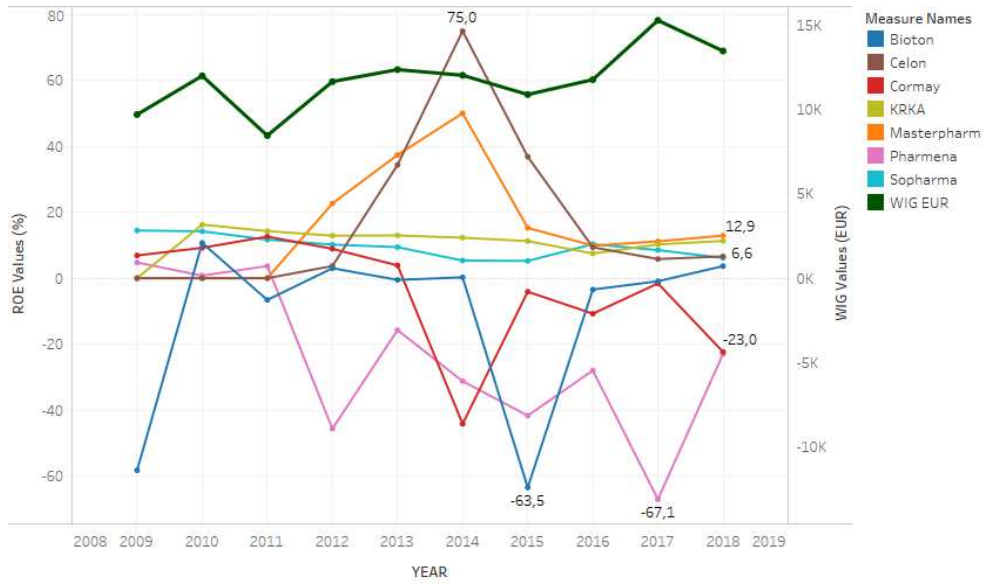


Figure 5: The ROE of the producers of pharmaceutical products listed on WSE (%)
Source: Authors' elaboration based on data from the WSE website

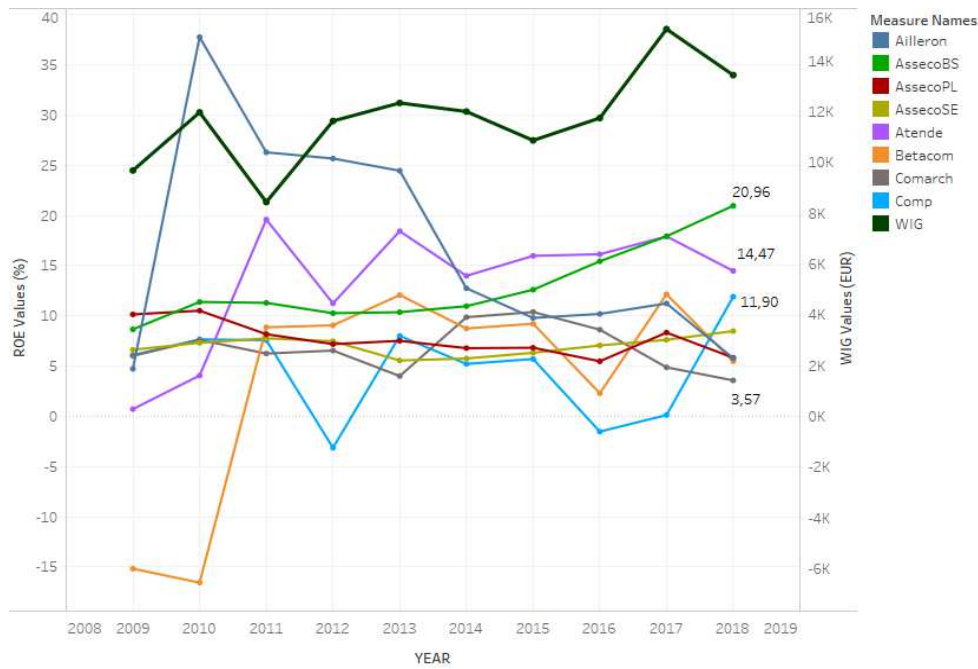


Figure 6: The return on equity of the IT companies listed on WSE (%)
Source: Authors' elaboration based on data from the WSE website

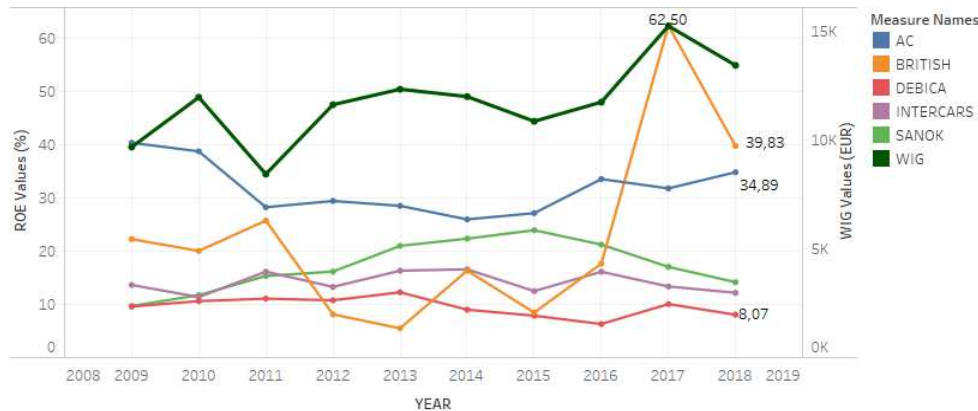


Figure 7: The return on equity of the automotive companies listed on WSE (%)
Source: Authors' elaboration based on data from the WSE website

Companies from the automotive sector had a trend of ROE very similar to the ROA evolution, except for British Automotive Holding, which registered much higher values. The spike from 2017, according to the report from that year, comes from the increase by 20% in the volume of car sales in the importer segment, result somewhat in vain due to the dissolution of the import agreement with the manufacturer. All analyzed companies show a downward trend for 2018, except for AC which has registered an increase.

4.5. Price to Earnings ratio (PER)

Price-to-Earnings Ratio (PER) is the ratio for valuing a company that measures its current share price relative to its EPS (earnings per share). A high PER could mean that a company's stock is over-valued, or the investors are expecting high growth rates. A low PER can indicate either that a company may currently be undervalued or that the company is doing exceptionally well relative to its past trends.

For the pharma sector, I decided to exclude Cormay and Pharmena because they registered losses in the last 5 years. Biomed and Bioton registered a loss in some years, then in the following year PER had big values which denotes that the companies are overvalued. KRKA and Sopharma are definitely doing well taking into account the turnover and the profit. Celon and Masterpharm had close values.

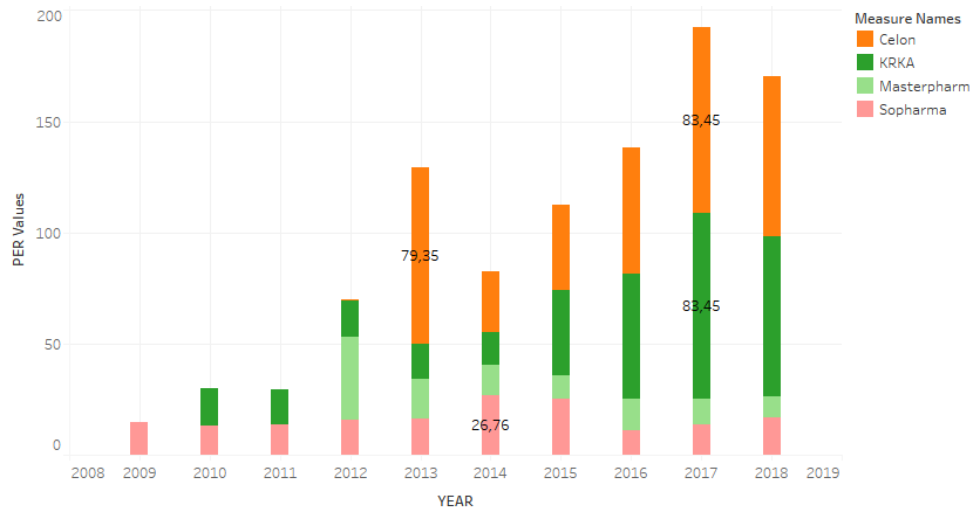


Figure 8: The PER of the producers of pharmaceutical products listed on WSE
Source: Authors' elaboration based on data from the WSE website

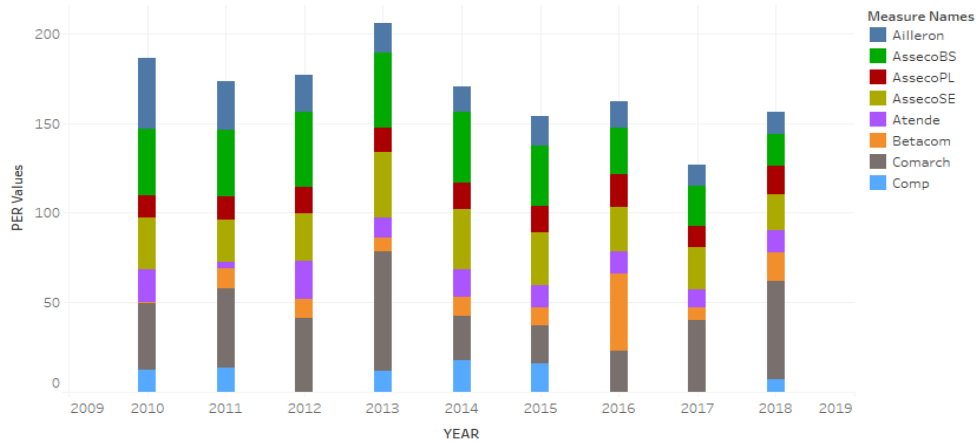


Figure 9: The price to earnings ratio of the IT companies listed on WSE
Source: Authors' elaboration based on data from the WSE website

The year 2009 is not presented because almost all companies have registered high PER values, not being relevant for the analysis. In the case of the IT companies, the values registered have been close from year to year, showing a linear evolution. Comarch has recorded higher values in some years and Comp has recorded losses.

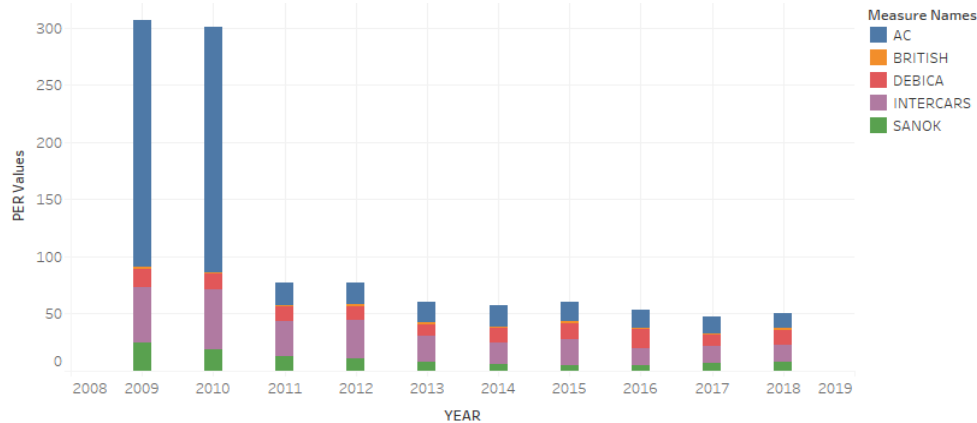


Figure 10: The price to earnings ratio of the automotive companies listed on WSE
Source: Authors' elaboration based on data from the WSE website

The PER values registered by the automotive companies were close in the years of the analysis, except for the first two years in which AC recorded higher values.

5. Conclusions

Following the analysis of the indicators we can conclude that the following companies have had a steady increase and showed a stable financial situation with no major fluctuations of results. For the pharmaceutical sector, KRKA has had the biggest increase in turnover, a steady evolution of ROA and ROE, but also a rising PER which I consider it represent a future growth expected by investors. For the IT sector, I consider the Asseco Group as being the most stable, showing a great evolution in the case of Asseco Business Solution and Asseco South Eastern Europe. For the automotive sector, I would say that AC showed a constant growth during the years, registered good values for ROA and ROE, and a constat PER value. The bigger companies like Debica and Intercars also showed a stable financial situation, with constant values, but as a smaller company, AC managed well.

The study has reached its objectives by providing significant information regarding the performance and evolution of the analyzed companies, facilitating future investments for the decision makers. As limits of the research, it is important to mention the existence of many other indicators that were not covered in the analysis, which together would form a more detailed picture regarding the performance of the analyzed companies.

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