

N.V. SHYRIAIEVA, A.O. SOLYANIK, V.V. KOVAL

STATS TOOLS FOR REVENUE ANALYSIS OF FORTUNE 500 LEADING SECTORS

This research is dedicated of tracing business tendency on the global market. The purpose of work is the analysis the Top 10 list of Fortune 500 over the last 10 years that represents economic indicators of the leading companies. In the paper, an overview of the list of the largest corporations, both public and private, in USA, which was published by Fortune 500, is presented. Moreover, Fortune 500 list gives information about profits for the fiscal year, change in revenues and profits, number of employees, sector, industry and location (city and state) of the corporations of interest. Therefore, this investigation illustrates an analyze of given data and a research of shifts between revenue and profit of different companies and changing a dominance of spheres of its business. Information from Fortune 500 allows to use visualization as a tool, that helps to conduct a comparative analysis across multiple companies of the list. It was selected the first 10 companies among 500 for analysis, which is only 5% of total, but the influence of their performance on the economy is colossal. It was analyzed revenue and quantity of selected industries. These data were handled and visualized using the program MS Excel. It is notable that the dynamic shifts the industries during 10 years are significant. It was found that the Health Care industry has been extremely “grown” and took 40% of the first 10 positions in Fortune 500. The Health Care industry was considered in details. It also was analyzed the positions of Health Care companies in precious years for representing boosted popularity of this industry clearly. All changes in the top are connected with modernization and technical development in the world that influence on increasing or decreasing a revenue and profit of corresponding companies. A demonstrative example of the stable rising is considered a retailing industry – Walmart corporation, and Health Care sector gains popularity. It is caused by a booming interest of people’s life and an appearance of a global pandemic – COVID-19, that influence not only the local market but also the global market.

Keywords: Fortune 500, leading sectors, statistical tools, profit, revenue, comparative analysis.

Н.В. ШИРЯЕВА, А.О. СОЛЯНИК, В.В. КОВАЛЬ

СТАТИСТИЧЕСКИЕ ИНСТРУМЕНТЫ ДЛЯ АНАЛИЗА ДОХОДНОСТИ ВЕДУЩИХ ОТРАСЛЕЙ ПО ВЕРСИИ FORTUNE 500

Данное исследование посвящено прослеживанию бизнес-тенденций на мировом рынке. Целью работы является анализ топ-10 списка Fortune 500 за последние 10 лет, который демонстрирует экономические показатели ведущих компаний, которые указывают на тенденции секторов и отраслей, находящихся в топе. Эта статья представляет собой обзор списка крупнейших корпораций, как государственных, так и частных, в США, который был опубликован в Fortune 500. Более того, список Fortune 500 предоставляет информацию о прибыли за финансовый год, изменениях в доходах и прибыли, количестве работников, секторе, индустрии и местонахождении (город и штат) исследуемых корпораций. Таким образом, данное исследование наглядно иллюстрирует анализ исходных данных и изучение изменений между доходами и прибылью различных компаний, а также изменение доминирования в сферах их среды бизнеса. Информации из Fortune 500 позволяет использовать визуализацию как инструмент, который помогает проводить сравнительный анализ по нескольким компаниям из списка. Для проведения анализа были выбраны 10 первых компаний из 500, что составляет 5% от общего количества, но влияние их деятельности на экономику колоссальное. Были проанализированы прибыль, доход и количество выбранных индустрий. Эти данные были обработаны и визуализированы с помощью программы MS Excel. Примечательно, что динамика изменений в индустриях за 10 лет значительна. Выяснилось, что индустрия здравоохранения чрезвычайно «выросла» и заняла 40% первых 10-ти позиций в Fortune 500. Индустрия здравоохранения была рассмотрена более подробно. Также были проанализированы позиции компаний здравоохранения за предыдущие года так, чтоб наглядно продемонстрировать возрастающую популярность индустрии. Все изменения в топе связаны с модернизацией и техническим развитием в мире, которые влияют на увеличения или уменьшение дохода и/или прибыли соответствующих компаний. Наглядным примером стабильного роста оказалась отрасль розничной торговли – компания Walmart, а индустрия здравоохранения набирает всё большую популярность, что вызвано бурным увеличением заинтересованности людей насчёт здоровья и появление глобальной пандемии – COVID-19, которая влияет не только на местный рынок, но и на мировой рынок.

Ключевые слова: Fortune 500, ведущие индустрии, средства статистического анализа, прибыль, выручка, сравнительный анализ.

Н.В. ШИРЯЄВА, А.О. СОЛЯНИК, В.В. КОВАЛЬ

СТАТИСТИЧНІ ІНСТРУМЕНТИ ДЛЯ АНАЛІЗУ ПРИБУТКОВОСТІ ПРОВІДНИХ ГАЛУЗЕЙ ЗА ВЕРСІЮ FORTUNE 500

Дане дослідження присвячене простежуванню бізнес-тенденцій на світовому ринку. Метою роботи є аналіз топ-10 списку Fortune 500 за останні 10 років, який демонструє економічні показники провідних компаній, які вказують на тенденції секторів і галузей, які знаходяться в топі. Ця стаття являє собою огляд списку найбільших корпорацій, як державних, так і приватних, в США, який був опублікований в Fortune 500. Більш того, список Fortune 500 надає інформацію про прибуток за фінансовий рік, зміни в доходах і прибутку, кількості працівників, секторі, індустрії та місцезнаходження (місто і штат) досліджуваних корпорацій. Таким чином, дане дослідження наочно ілюструє аналіз вихідних даних і вивчення змін між доходами і прибутком різних компаній, а також зміну домінування в сферах їхнього середовища бізнесу. Інформація з Fortune 500 дозволяє використовувати візуалізацію як інструмент, який допомагає проводити порівняльний аналіз по декільком компаніях зі списку. Для проведення аналізу були обрані 10 перших компаній з 500, що складає 5% від загальної кількості, але вплив їх діяльності на економіку колосальне. Були проаналізовані прибуток, дохід і кількість обраних індустрій. Ці дані були оброблені і візуалізовані за допомогою програми MS Excel. Примітно, що динаміка змін в індустріях за 10 років значна. З'ясувалося, що індустрія охорони здоров'я надзвичайно «виросла» і зайняла 40% перших 10-ти позицій в Fortune 500. Індустрія охорони здоров'я була розглянута більш докладно. Також були проаналізовані позиції компаній охорони здоров'я за попередні роки так, щоб продемонструвати зростаючу популярність індустрії. Всі зміни в топі пов'язані з модернізацією і технічним розвитком в світі, які впливають на збільшення або зменшення доходу та / або прибутку відповідних компаній. Наочним прикладом стабільного зростання виявилася галузь роздрівної торгівлі - компанія Walmart, а індустрія охорони здоров'я набирає все більшої популярності, що викликано бурхливим збільшенням зацікавленості людей щодо здоров'я та поява глобальної пандемії - COVID-19, яка впливає не тільки на місцевий ринок, а й на світовий ринок.

Ключові слова: Fortune 500, провідні компанії, засоби статистичного аналізу, прибуток, виручка, порівняльний аналіз.

Introduction:

«This year’s Fortune 500 marks the 65th running of the list. In total, Fortune 500 companies represent two-thirds of the U.S. GDP with \$13.7 trillion in revenues, \$1.1 trillion in profits, \$22.6 trillion in market value, and employ 28.7 million people worldwide» as it was posted on official page of Fortune 500 magazine [1].

Most people in their regular life don’t know much about Fortune 500, unless the person is a businessman or he is somehow connected to the international business and looks for the trends and global changes of financial flows. Fortune 500 is a list which annually published by Fortune Magazine, which ranked companies by their total revenue at first. Additionally, it allows users to receive information about many other economic characteristics. That is why many researches find the data from the list confident and use them for trends analysis as well as to draw conclusions about the movements of the industries.

One of the most straight-forward and easiest analyses using Fortune 500 is the visualization of revenues of the largest multinational companies and detection the leaders. It means that these corporations are considered as the most top-requested and a consequence of that is a high demand on their products in the USA and worldwide.

The first picture (Figure 1) shows nowadays leaders in the USA regarding to the revenue. According to the diagram, it is safe to say that Walmart is an absolute dominant and takes 20% of the top 10 companies by the revenue.

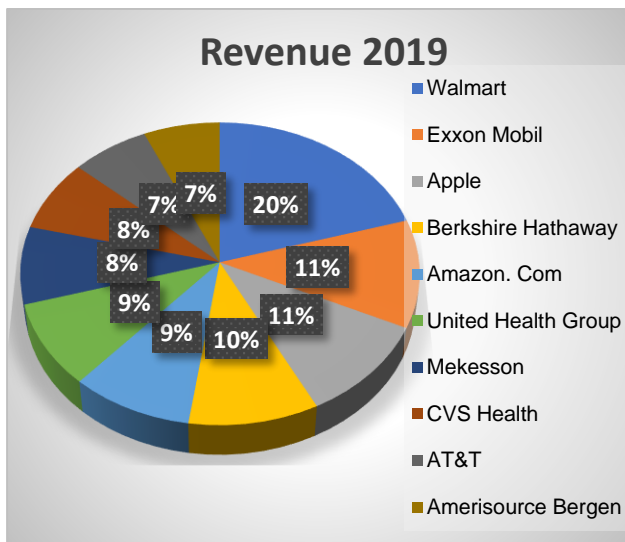


Figure 1: Revenue of the top 10 companies in 2019.

Consider the success story of the Walmart company as the following. The Walmart is a leader in Fortune 500 from 2003 except 2009 and 2006. It was opened in 1962 in Rogers town by Sam Moore Walton. The company appeared in Fortune list 25 years ago. The Walmart is the biggest retailer shop in the world. It is head office is in Bentonville town. The President, Chief Executive Officer & Director is Douglas McMillon. They have extended their borders long time ago and became international company. Their industry is called General Merchandisers. They

distribute a great amount of different brands and not only in food sphere but also clothes etc. The company also sell products via the internet, so everybody can order it online and after that get it from the nearest building of Walmart. The company is now innovating with things like a personal shopping service and self-driving delivery vans.

The success of this market is clear because of their revenue. They are very successful in competing with Amazon that takes the 5th place in the top list. They keep trying to provide many modern and new technologies to compete with Amazon. Walmart has significant changes in their global portfolio over the last year. They attracted thousands of people to visit their store and managed to use online business as well. They experiment with a Jetblack that is a personal shopping service using an artificial intelligence (AI) component. As we can see they do their best in a good way so it gives them a priority in the midst of retailer shopping business. Now they operate above 11 700 stores in 28 countries.

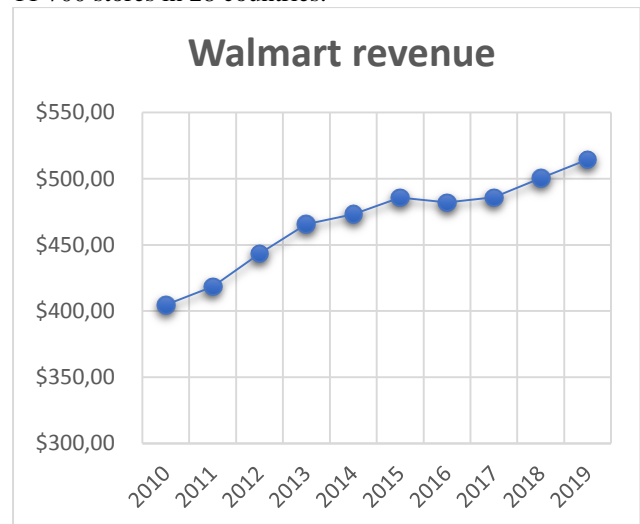


Figure 2: Revenue of Walmart from 2010 until 2019

The Walmart is representative of sector of retailing. In recent years retailing industry is so popular, because like in any time people want to buy a lot of different products and find products with loyal prices, but don’t want to spend much time to search it in the different shops, furthermore convenience, money and time are the most important criteria for consumers nowadays. Not surprisingly that this sector is in the top of Fortune 500 in 2019.

The second company of retailing sphere presented in Figure 1 is Amazon.com. It started as a startup and has been referred to as “one of the most influential economic and cultural forces in the world”. The headquarter is located in Seattle, Washington, US. The Chairman, President & Chief Executive Officer of company is Jeff Bezos. It is started as an online marketplace for books but later they expanded a scale. They started to distribute a great amount of products such as food, toys, jewelry, software, video games and many others. In such case it’s become widespread. Amazon also spreads downloads and streaming of music, video and audiobooks. And one day its revenue increases by 31% to \$233 billion in 2018. So, it was a booming in business. Now it has almost successful and stable situation and it is continuously boosting year by

year. It is because of the demand of such type of products distribution. More and more people buy goods and services online. Because of the quarantine people are obliged to sit at home and, in these circumstances, using the internet for shopping is the best solution to get necessary products. Thus, this industry is expected to gain posterity and headway.

The energy sector takes the second place in the top and Exxon Mobil Company represents this sector. During the last 10 years (researching period) Exxon Mobil doesn't go less than the 4th place and in 2012 they took the first place in the list. So, it is quite a good achievement. The diagram demonstrates changes in revenue from 2010 until 2019 (Figure 3).

Exxon Mobil has been on the list of top Fortune 500 companies for 65 years. Their location is in Irving, Texas. The Chairman & Chief Executive Officer is Darren W. Woods. It appeared as the result of integration of two corporations – Exxon and Mobil. The company provides its services for six continents and makes strategic steps in trading energy traditionally an area dominated by its rivals. It can be seen (Figure 3) that the revenue of the Exxon Mobil decreases from 2011 until 2017, but the previous amounts are not reached yet by 2019. It shows that industry of energy becomes less profitable through the years, but scale of production does not allow having the huge changes in revenue.

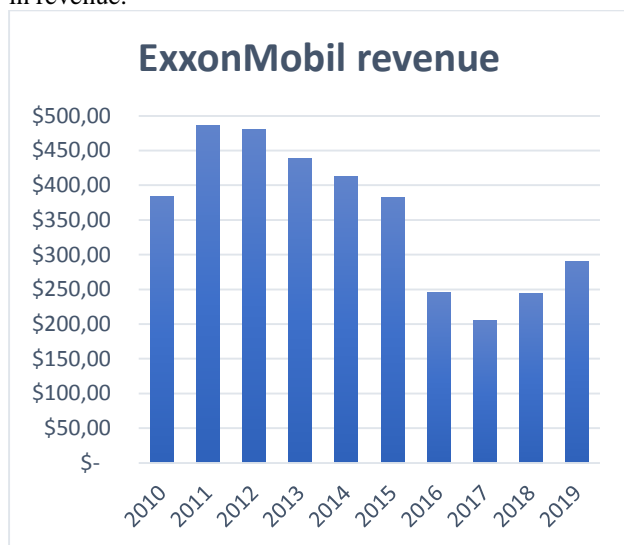


Figure 3: Tendency of ExxonMobil revenue from 2010 until 2019.

The third top position is taken up by Apple company, the representative of technology industry. Apple is a total leader in the sphere of production. Their gadgets bring them popularity all over the world. This brand is known everywhere. The quality of products is so high and also the price increases every year. However, when the new product is putted on the market, the prices decline.

It firstly appeared on Fortune 500 list 37 years ago. They have a high profit compared with their rivals in the top list. Such success is caused because of the modernization in the whole world and a high demand for technical products. Now it is a quite difficult to find a person without gadgets. So, such tendency gave them opportunity to have a big revenue and profit in business

operation: Apple's revenue has been increasing each year from 2010 (\$65,225) to nowadays (2019- \$260,174).

Healthcare is one of the highest growth industries in the entire world. Four companies in Fortune 500 are the agents of Health Care sector: McKesson, CVS Health, Amerisource Bergen and United Health Group. In this sector is noticeable a significant increase in a demand of Health Care and consequently growing the revenues, that is illustrated by a chart (Figure 5). Over \$200 billion of revenue was generated last year by the Health Care sector in the United States. Health Care sector includes many industries such as the life sciences, biotechnology, pharmaceuticals, services, and healthcare equipment. Nevertheless, this does not mean that these industries work separately. They work together to provide medical care to people worldwide.

At least two companies among the HealthCare corporations in Fortune 500 were in the top five of this industry during the last four years. It becomes more and more popular to monitor one's health. Because of the appearance of many dangerous diseases people start to use this service and buy goods frequently. McKesson is the largest drug distributor in the USA. Its revenue is growing constantly, because of the two reasons: (1) the prices growth on drugs and (2) enormous quantity of clients trusted the quality of McKesson products.

CVS Health is a pharmacy business, which now has downward price pressure, but thanks to more network claims and increased prescription volume, it is continued to be one of the companies of Fortune 500. The revenue dynamics shows positive trend for Health Care sector by its top performers in 2019. This is illustrated by Figure 4.

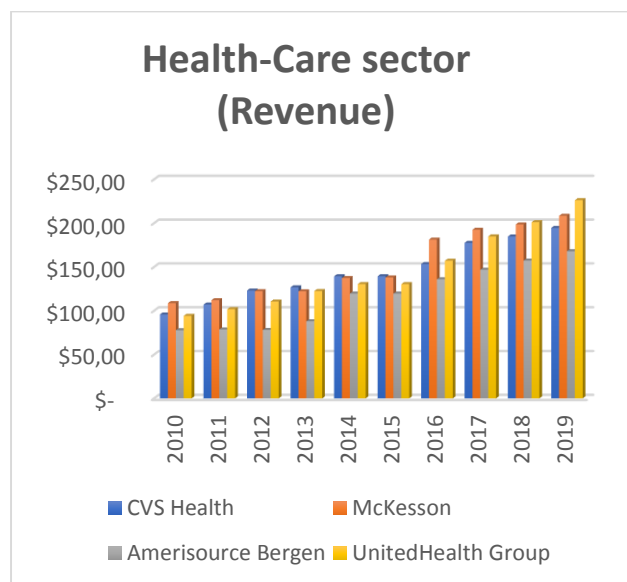


Figure 4: Tendency of Health Care sector from 2010 till 2019.

It should be noted also that the profits of some of these companies are strangely negative or weird small as contrasted with their revenue. For example, CVS Health had a negative profit of -594 \$ in 2019, and Amerisource Bergen met the same problem in 2018 – its profit was - 3864 \$. The negative profit means that the company has more expenditures then they received money from selling. It happens because some extra situations like increasing in

taxes, changings in currency, inflation is occurred. Of course, it is a problem for corporations but they cannot expect it to prevent such force majeure. It is clear that even big companies can meet financial problems, but it does not mean that their future of business is closed.

Due to the growing and aging population, rising prevalence of chronic diseases, Health Care sector is potentially attractive and thus, it is faster growing and developing sector now and in the nearest future. It can be confirmed by simple analysis of sectors, which were in-demanded ten years ago in comparison to 2019 (Figures 5 and 6).

It is not an overstatement to say that during the last ten years Health Care sector is expanded on a grand scale. The pie chart diagram for 2010 (Figure 5) does not include any of the companies from the Health Care sector. In 2010, the Energy sector was the dominant in the USA. Now it is obviously to establish the fact of fast growing and gaining popularity of the Health Care sector starting from 2015. That forced out Energy sector of its main position. Furthermore, because of pandemic situation of Covid-19 in the world, it is expected a high increase in the Health Care sector in 2020. Therefore, some experts believe that a rapidly growth in revenue and profit in this industry of business will happen.

Currently, HealthCare sector is complete leader in industry composition of the USA. However, it can be expected that the same situation is taken place in the rest of the Earth, because, nobody will mind, that Health Care is always requested by humanity.

In addition, Figures 5 and 6 explore the tendency of sectors, which are in the top list during 10 years. Nowadays there has been a shift of sectors. Such as Motor vehicles & Parts has already disappeared from the top companies of Fortune 500, though it was popular in previous years. Now, Health Care is dominant because there are four corporations in Fortune 500 list in 2019.

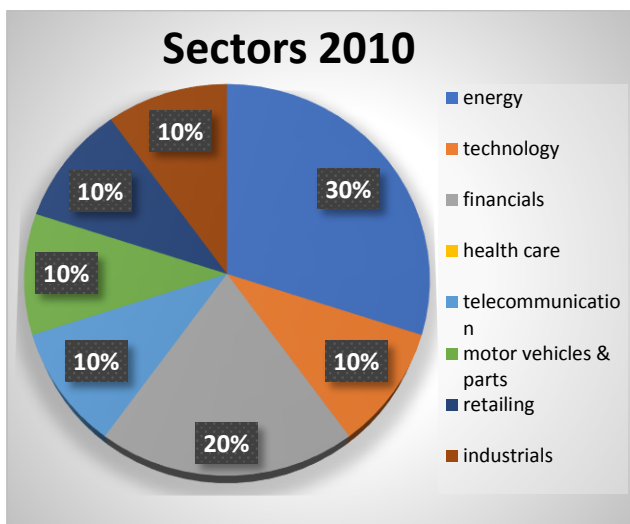


Figure 5: Sectors percent composition in the USA in 2010.

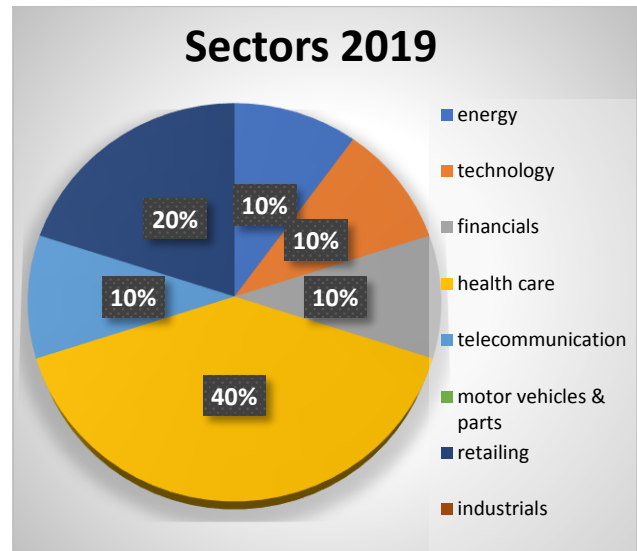


Figure 6: Sectors percent composition in the USA in 2019.

Retailing sector also becomes demanded and established itself as a leading choice in the list. Energy gradually decreases its tend, but stays in the third place like in the previous years. In 2015 Energy sector in the USA faced with few financial problems, such as low price of gas and a global oil glut. The USA oil and gas companies were forced to lay off workers and some ever removed their headquarters abroad. However, these problems were solved during few years and now Energy sector try to maintain stability and keep the Fortune 500 list.

Industrials disappeared from the top 10 list, mostly because of it is time of post-industrial societies, that offers mainly services, force out of industrial society, that based mainly on industrial manufacturing. All know that in our time the information is the main asset, so processes with it are preferred. Nevertheless, it does not mean that Industrials is completely disappeared.

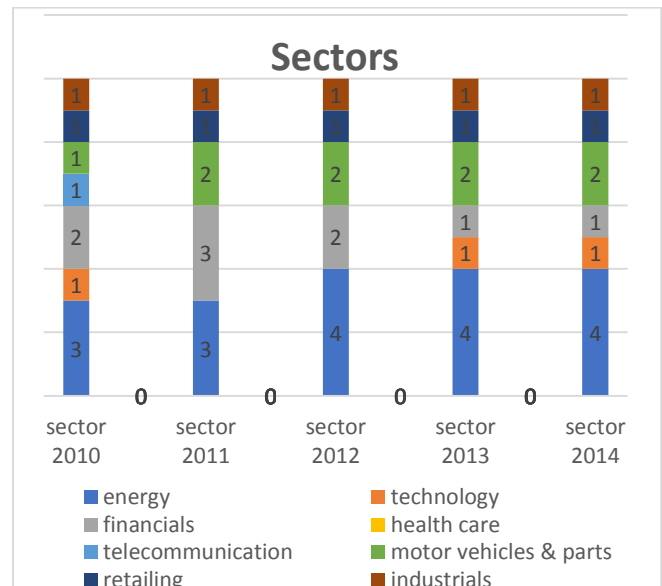


Figure 7: Sectors movement from 2010 till 2014.

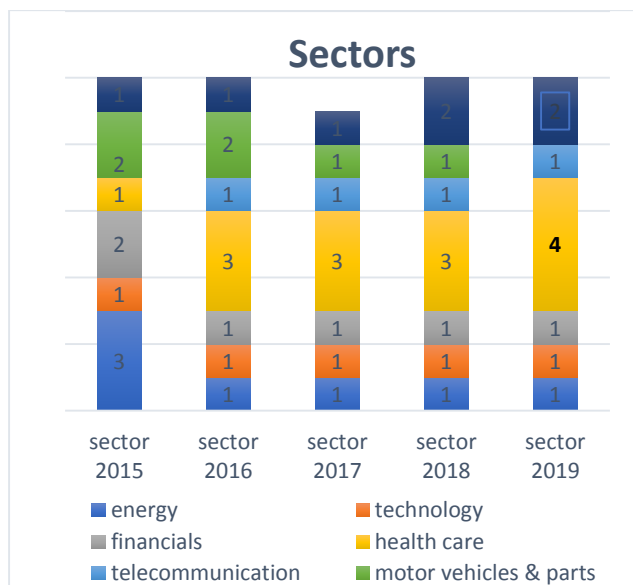


Figure 8: Sectors movement from 2015 till 2019.

Conclusion:

In the paper, the revenue analyses of the top 10 companies of Fortune 500 list was performed for the last 10 years period. It gives an understanding of situation in demanding and supplying markets not only in the borders of one country (in this case – the USA), but also in a global way. Just to have understanding about up to day activities, it was applied Fortune 500 list and made inferences. It may be said that the Figures 1-8 are the helpful tools to visualize needed information, which help not only to see what companies are the most successful in the USA, but also it imparts an understanding what sectors of production are the biggest in-demanded, what spheres of business have

About the Authors/ Відомості про авторів /Сведения об авторах

Ширяєва Наталя Володимирівна (Ширяева Наталья Владимировна, Shyriaieva Natalia Volodumyryvna)

– кандидат технічних наук, доцент кафедри міжнародного бізнесу та фінансів НТУ «ХПІ»; м. Харків, Україна; e-mail: natalia.shyriaieva@gmail.com.

Соляник Аlesia Олегівна (Соляник Аlesia Олеговна, Solyanik Alesia Olegivna) – студентка першого курсу

Навчально-наукового інституту економіки, менеджменту і міжнародного бізнесу, НТУ «ХПІ»; м. Харків, Україна; e-mail: galesyasol@gmail.com.

Коваль Валерія Віталіївна (Коваль Валерия Витальевна, Koval Valeria Vitaliyivna) - студентка першого

курсу Навчально-наукового інституту економіки, менеджменту і міжнародного бізнесу, НТУ «ХПІ»; м. Харків, Україна; e-mail: leralove370@gmail.com.

the higher revenue and make sure about starting own business choosing among the most popular industries to succeed. Moreover, the great impact on shift of sectors is influenced by natural and technical changes, inventions and breakthroughs; a high demand of different new Health Care products is caused by the appearance of dangerous illnesses, broadened around the world, and the spread of “the cult” of healthy lifestyle.

In the future, global changes can become the reasons of reshaping the composition of sectors and industries. Firstly, a change in needs of humankind. It will mainly be reflected by shifts in demand of products. Some of goods may withdraw of markets, and some will substitute the previous one or that one which is good will combine the capacities of few commodities and so forth. Secondly, evolution of equipment will take fewer difficulties with manufacturing and services business. Furthermore, advancement of education of rising generation can influence on growth and shifts of sectors, because the more well-educated people humanity have, the more progress will be.

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