

Big Pharma, Big Business

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Abstract

Since their birth, human beings have tried to preserve their health in a good condition for as long as it is possible during their life, especially in modern times. The result was not only the appearance and development of the healthcare systems all over the world but also of many international healthcare organizations, non-governmental organizations and pharmaceutical companies. The development of new technologies, the growing elderly population, and the increasing need for complex healthcare products and services have been some of the factors that led to the expansion of Big Pharma at a global level. The aims of the paper are to present and briefly analyze the evolution of Big Pharma by their revenues in the last years. The paper shows the growing importance of the pharmaceutical sector. Also, it illustrates that Big Pharma are powerful companies and make businesses worldwide. Johnson & Johnson was by far the largest global pharmaceutical company by revenue in the period 2016-2020.

Key words: Big Pharma, pharmaceutical sector, healthcare, revenue, business

J.E.L. classification: F23, I00, L69

1. Introduction

Since their birth, human beings have tried to preserve their health in a good condition for as long as it is possible during their life, especially in modern times. The logical result was not only the appearance and development of the healthcare systems all over the world but also of many international healthcare organizations (e.g., the World Health Organization), non-governmental organizations and pharmaceutical companies. Since the beginning of 2020, the emergence and worldwide diffusion of the COVID-19 pandemic have profoundly challenged the healthcare systems worldwide (Allen, 2021).

In numerous developed countries, the healthcare sector accounts for 8 to 15 % or more of the gross domestic product (GDP), making it one of the largest in their economies (Walshe *et al*, 2011) and a key element in ensuring the well-being of their population (Dumit, 2012). It is said that the "provision of high quality and affordable health care is one of the greatest challenges facing the nations of the world" (Hall, 2012, p.v). At the national level, the government is responsible for the financing, provision and regulation of healthcare (Wendt *et al*, 2009).

The rise of the personalised medicine, the growing elderly population and the increasing need for complex healthcare products and services have been only three of the factors that led to the expansion of the big pharmaceutical companies- the so-called "Big Pharma"- at a global level. Today's age of uncertainty (Toma *et al*, 2015) and the development of new and disruptive technologies fueled by the Fourth Industrial Revolution (Ćwiklicki *et al*, 2020) require Big Pharma to continuously innovate and adapt their business models (Tohănean *et al*, 2018; Toma *et al*, 2018) to achieve business excellence (Toma *et al*, 2017). Their strategic options of a country or a geographic region in a highly competitive business environment (Toma *et al*, 2013) are influenced by various factors, such as competition, pandemic conditions or geopolitical instability.

The aims of the paper are to present and briefly analyze the evolution of Big Pharma by their revenues in the last years. The paper is structured as follows. The next section deals with the literature review. The research methodology is displayed in the third section of the paper. It is followed by the findings of the paper. The last section exhibits the conclusions.

2. Literature review

There is a plethora of studies related to the healthcare sector, in general, and the pharmaceutical sector, in particular. As one of the largest and complex economic sector, the healthcare sector consists of „all businesses involved in the provision and coordination of medical and related goods and services” (Investopedia, 2021, p.1). The following main types of companies are operating within the healthcare sector:

- drug manufacturers (e.g., biotechnology companies, pharmaceutical companies);
- medical equipment makers;
- managed healthcare firms;
- healthcare facilities companies (Investopedia, 2021).

On its turn, the pharmaceutical sector has proved to be essential in our society both in health and economic terms (Gascón *et al*, 2017). Pharmaceuticals are considered as “complex chemical structures but they can also be simple aromatic molecules like the anaesthetic, propofol (2,6-diisopropylphenol), simple aliphatic molecules like the vasodilator, nitroglycerine (1,2,3-trinitroxypropane), or more complex but still relatively low molecular weight molecules like the statin, atorvastatin (MW 558.6) ((3R,5R)-7-[2-(4-fluorophenyl)-3-phenyl-4-(phenylcarbamoyl)-5-propan-2-ylpyrrol-1-yl]-3,5-dihydroxyheptanoic acid)” (Taylor, 2016, p.4). The pharmaceutical sector has some specific features. First, it has made and continues to make an important contribution to human wellbeing. Second, the pharmaceutical sector encompasses a relatively small number of Big Pharma. Third, it represents one of the largest sector in most economies.

Big Pharma is a nickname given to the world’s largest pharmaceutical companies that represent some of the most powerful business organizations at the global level. In other words, Big Pharma constitutes “a term for the world’s largest publicly traded pharmaceutical companies” (Compton, 2021, p.1). It is said that “the current big pharma model is transitioning to that of a lean, focused company with a research footprint within key innovation bioclusters and a growing revenue stream from specialty products and biologics and emerging markets” (Gautam *et al*, 2016, p.379). Big Pharma are characterized by the following elements:

- They are risky business.
- Most of them own subsidiaries worldwide.
- They provide many jobs all over the world.
- They contribute to human wellbeing.
- They heavily invest in research and development but also in marketing.
- They highly contribute to the GDP of the host countries.
- They are often criticised for their manipulative tactics to influence public opinion and increase sales.
- They have been involved in many corporate scandals and paid numerous fines for fraud.

Nowadays, Big Pharma are representing important players in the global economy. Their profits for prescription drugs are expected to reach \$610 billion this year (Compton, 2021).

3. Research methodology

In order to achieve the aims of the paper, the authors used a quantitative research method based on a desk-research analysis. First, they identified and collected various secondary data by carrying on a comprehensive literature review. Second, the authors revised numerous articles, reports and books found in Romanian libraries and electronic databases. Third, they classified, analyzed, and synthesized the data. Fourth, they designed and elaborated the paper.

4. Findings

The American colossus Johnson & Johnson dominated the top of Big Pharma by their revenues in the period 2016-2018 (Table no. 1, 2 and 3). The headquarters of the first 15 largest pharmaceutical companies retailers were located in the following countries:

- USA- eight companies;
- Switzerland- two companies;
- United Kingdom- two companies;
- Germany- one company in 2016, two companies in 2017 and 2018;
- France- one company;
- Israel- one company in 2016 and 2017.

Table no. 1. Top 15 global pharma companies by 2016 revenue

Ranking	Company	Home country	Revenue (\$ billions)
1	Johnson & Johnson	USA	71.89
2	Pfizer	USA	52.82
3	Roche	Switzerland	50.07
4	Novartis	Switzerland	49.44
5	Merck & Co.	USA	39.80
6	Sanofi	France	38.52
7	GlaxoSmithKline	United Kingdom	37.93
8	Gilead Sciences	USA	30.39
9	Bayer	Germany	27.78
10	AbbVie	USA	25.63
11	AstraZeneca	United Kingdom	23.00
12	Amgen	USA	22.99
13	Teva Pharmaceutical Industries	Israel	21.90
14	Ely Lilly	USA	21.22
15	Bristol-Myers Squibb	USA	19.43

Source: (Sagonowsky, 2018)

Table no. 2. Top 15 global pharma companies by 2017 revenue

Ranking	Company	Home country	Revenue (\$ billions)
1	Johnson & Johnson	USA	76.45
2	Roche	Switzerland	54.12
3	Pfizer	USA	52.55
4	Novartis	Switzerland	50.14
5	Sanofi	France	40.91
6	Merck & Co.	USA	40.12
7	GlaxoSmithKline	United Kingdom	39.24
8	Bayer	Germany	28.74
9	AbbVie	USA	28.22
10	Gilead Sciences	USA	26.11
11	Ely Lilly	USA	22.87
12	Amgen	USA	22.85
13	AstraZeneca	United Kingdom	22.50
14	Teva Pharmaceutical Industries	Israel	22.38
15	Bristol-Myers Squibb	USA	20.77

Source: (Sagonowsky, 2018)

Table no. 3. Top 15 global pharma companies by 2018 revenue

Ranking	Company	Home country	Revenue (\$ billions)
1	Johnson & Johnson	USA	81.60
2	Roche	Switzerland	58.76
3	Pfizer	USA	53.64
4	Novartis	Switzerland	44.75
5	Merck & Co.	USA	42.29
6	GlaxoSmithKline	United Kingdom	40.96
7	Sanofi	France	38.59
8	AbbVie	USA	32.75
9	Bayer	Germany	28.39
10	Amgen	USA	23.75
11	Bristol-Myers Squibb	USA	22.56
12	Gilead Sciences	USA	22.13
13	Ely Lilly	USA	21.50
14	AstraZeneca	United Kingdom	21.05
15	Boehringer Ingelheim	Germany	20.67

Source: (Sagonowsky, 2020)

In the period 2019-2020, Johnson & Johnson remained the leader of the top of Big Pharma by their revenues (Table no. 4 and 5). The headquarters of the first 15 largest pharmaceutical companies retailers were located in the following countries:

- USA- eight companies;
- Switzerland- two companies;
- United Kingdom (UK)- two companies;
- Germany- one company;
- France- one company;
- Japan- one company.

Table no. 4. Top 15 global pharma companies by 2019 revenue

Ranking	Company	Home country	Revenue (\$ billions)
1	Johnson & Johnson	USA	82.10
2	Roche	Switzerland	65.40
3	Pfizer	USA	51.75
4	Novartis	Switzerland	47.45
5	Merck & Co.	USA	46.84
6	GlaxoSmithKline	United Kingdom	43.32
7	Sanofi	France	40.46
8	AbbVie	USA	33.27
9	Takeda	Japan	30.27
10	Bayer	Germany	26.59
11	Bristol-Myers Squibb	USA	26.15
12	AstraZeneca	United Kingdom	24.38
13	Amgen	USA	23.36
14	Gilead Sciences	USA	22.45
15	Ely Lilly	USA	22.32

Source: (Sagonowsky, 2021)

Table no. 5. Top 15 global pharma companies by 2020 revenue

Ranking	Company	Home country	Revenue (\$ billions)
1	Johnson & Johnson	USA	82.60
2	Roche	Switzerland	62.05
3	Pfizer	USA	41.90
4	Novartis	Switzerland	48.66
5	Merck & Co.	USA	48.00
6	GlaxoSmithKline	United Kingdom	43.77
7	Sanofi	France	41.08
8	AbbVie	USA	45.80
9	Takeda	Japan	29.25
10	Bayer	Germany	25.71
11	Bristol-Myers Squibb	USA	42.52
12	AstraZeneca	United Kingdom	26.62
13	Amgen	USA	25.42
14	Gilead Sciences	USA	24.69
15	Ely Lilly	USA	24.54

Source: (Sagonowsky, 2021)

The sales forecast for 2021 indicates almost the same leading Big Pharma in the top as in the previous period but the leader will be the Swiss-based company Roche (Table no. 6).

Table no. 6. Sales forecast of the leading pharmaceutical companies worldwide for 2021

Ranking	Company	Home country	Sales (\$ billions)
1	Roche	Switzerland	51.30
2	Novartis	Switzerland	51.00
3	AbbVie	USA	50.50
4	Johnson & Johnson	USA	46.90
5	Bristol-Myers Squibb	USA	46.00
6	Pfizer	USA	45.60
7	Merck & Co.	USA	44.80
8	Sanofi	France	44.00
9	GlaxoSmithKline	United Kingdom	39.00
10	Takeda	Japan	30.50

Source: (Mikulic, 2021)

The total revenues of the 15 global Big Pharma increased in the period 2016-2020. Starting from the above statistics several issues can be outlined as follows:

- The global pharmaceutical industry has been and is still dominated by powerful multi- and transnational corporations.
- More than 50% were US-based companies.
- North America and Europe were the main locations of the leading 15 Big Pharma.
- Johnson & Johnson dominated the top of the global pharmaceutical companies.
- The top remained pretty the same in the period 2016-2020.
- The vast majority of the leading 15 Big Pharma achieved better results from one year to another.

5. Conclusions

The global pharmaceutical sector has become a topic of interest for many researchers and practitioners all over the world, especially in the past decades. As a consequence of the rapid diffusion of the globalization process, the leading Big Pharma are doing business worldwide.

The paper shows the growing importance of the pharmaceutical sector both in health and economic terms. It analyses the evolution of the leading 15 Big Pharma in recent years, mostly located in North America and Europe. They are huge and powerful companies and make businesses at a global level. Johnson & Johnson was by far the largest global pharmaceutical company by

revenue in the period 2016-2020.

Further researches may broaden this study by taking into account the analysis of other economic indicators, such as the number of employees, price/earnings ratio, or profit.

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