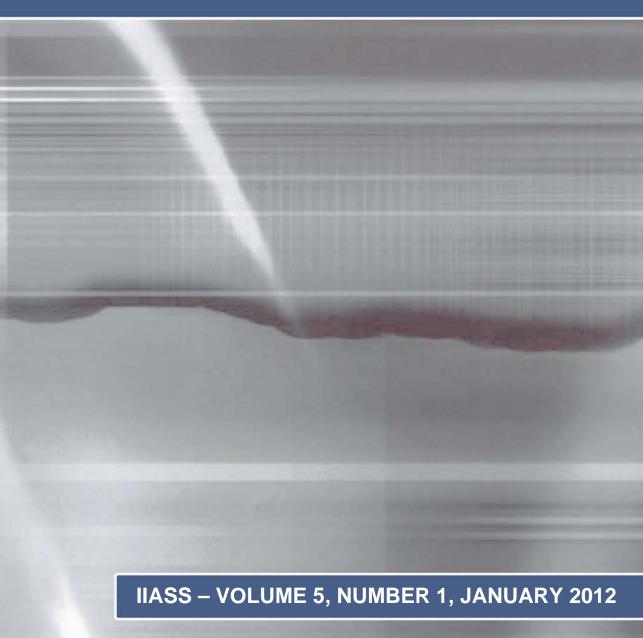
# Peer-reviewed academic journal

# Innovative Issues and Approaches in Social Sciences



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# GLOBALIZATION INFLUENCES STRATEGIC CHANGES AND MOVEMENTS

# Dragan Kesič<sup>1</sup>

#### Abstract

The aim of this paper is to evaluate and present the development of world pharmaceutical industry in the last several years. According to our research, we may emphasize that this industrial sector has been strategically changing and has been steadily concentrating and consolidating in the last decade. We may underline that intensive consolidation of world pharmaceutical industry is quite a complex process, having been driven by several factors and conditioned mostly by some defines strategic issues. We may conclude that further globalization, concentration and consolidation processes of world pharmaceutical industry are to be foreseen.

Key words: pharmaceutical industry, globalization, consolidation, strategic issues

#### Introduction

We may describe the most important characteristics of world pharmaceutical industry as following ones:

- increased globalization,
- changing structure of competition and increased competitiveness,
- lack of new products, despite increased investments into R&D (Research & Development) activities,
- increased importance of regulatory issues (registrations, intellectual property rights, litigations),
- fast consolidation and concentration of the world pharmaceutical industry,
- increased importance of strategic elements and strategic management,
- ageing of world population and opening up of some new therapeutic fields.

World pharmaceutical market has undergone fast, unprecedented, tremendous and complex changes in the last several years. We may say that pharmaceutical industry has been adapting itself more to the market trends and market demands. Further strategic development of the world

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pharmaceutical industry shows relatively clearly its significant consolidation and concentration and strong market orientation. Pharmaceutical industry today probably unite the biggest of all mankind potentials. Development of brand new drug is today estimated to need investment over 1.2 billion \$ and takes over 12 years to bring it as a finished, legally registered and approved product to a market place (Pharma Strategy Group, 2007;43, World Review, 2009;56), This is at the same time very complex, comprehensive and highly risky job with no final guarantee that a new product might succeed onto the market and bring revenues back. If a pharmaceutical company wants to achieve with a brand new product the market success, it needs to invest heavily into marketing and sales activities. Thus is by no surprise as we may conclude that basic research and development activities (R&D) together with marketing and sales activities are two the most important operative and even more strategic activities of the world pharmaceutical industry. Here the biggest investments of the pharmaceutical industry are poured by all means. Having analysed these figures, we have found that the biggest, innventive pharmaceutical companies invest on average around 16% of their sales into R&D and even more, around 25% or even more, into marketing and sales activities (Kesič, 2006:22). However, these ratios, especially these for R&D investments, are even higher with specialists, like biotechnology and pharmacogenomic pharmaceutical companies, and much lower with generic pharmaceutical companies (Kesič, 2006:28). As mentioned, world pharmaceutical industry is structurally not unique, as pharmaceutical companies differ according to their basic performance, vision and strategic development. We may define three different groups of the world pharmaceutical companies:

- pharmaceutical companies which primarily work on basic research, development and marketing and sales of brand new, innventive, original pharmaceutical products (so called originators),
- pharmaceutical companies which primarily work on development and sales of generic products (so called generic or copycat producers),
- pharmaceutical companies which primarily work on basic research and development of biotechnology and pharmacogenomic products and technologies of new delivery systems (so called specialists).

We may emphasize that products are by no means the main drivers for growth of the world pharmaceutical industry. Pharmaceutical companies strongly compete on products' characteristics and tend to invest heavily into marketing activities in endeavour to gain prescribers/patients loyalty and to compete as well directly with other pharmaceutical companies.

Table 1: Leading world pharmaceutical companies in 2009\*

Position	Company	Country of	Sales in	World
		origin	billion \$	market
				share in %
1.	Pfizer	USA	45.5	6.1
2.	Sanofi-aventis	France	42.1	5.6
3.	GlaxoSmithKline	Great	38.2	5.1
		Britain		
4.	Roche	Switzerland	37.6	5.0
5.	AstraZeneca	Great	32.8	4.4
		Britain		
6.	Novartis	Switzerland	30.9	4.1
7.	Merck&Co.	USA	25.2	3.4
8.	Johnson&Johnson	USA	22.5	3.0
9.	E.Lilly	USA	21.8	2.9
10.	Abbott	USA	16.5	2.2

<sup>\* -</sup> according to consolidated sales of pharmaceuticals and vaccines

Source: adapted from the companies' official published reports

The leading ten world pharmaceutical companies currently command over 42 % market share of the global pharmaceutical market. For a comparison, this figure was only 30 % ten years ago. This is quite a significant mark and proof as well how intensive market consolidation and concentration of world pharmaceutical industry has changed world pharmaceutical market in the last several years.

The world pharmaceutical industry has undergone deep changes in the last decade. Most notably, the strong process of consolidation and concentration has been going on, practically in all three defined pharmaceutical sectors; numerous mergers and acquisitions have occurred, resulting in the forming of complete new companies, respectively. We may argue that competitiveness in the world pharmaceutical industry has been increasing tremendously.

We may forecast that, taking into account the mentioned factors, further consolidation and concentration of the world pharmaceutical industry is realistically expected. We may foresee a formation of even bigger pharmaceutical concerns in all three sectors of the pharmaceutical industry. Alongside, further lack of brand new products is expected with highly increased competitiveness and a furious fight for market shares and global customers' loyalty.

# Research objectives

We aim trying to find out which strategic objectives and factors are the most important reasons for the fast concentration and consolidation for the pharmaceutical industry. We would like to evaluate how decisive are the most important strategic elements which influence a strong consolidation process of the world pharmaceutical industry, thus we pose the following two hypotheses:

H1: Pharmaceutical industry has been concentrating due to several factors, like globalization trends, increased competitiveness and consolidation processes

H2: Concentration has been going on in all groups of pharmaceutical companies

## Globalization in the world pharmaceutical industry

We can underline that globalization is almost a synonym for a modern economy. Nowadays the global competition is mostly based on the knowledge and technology and ability to serve the customers properly. swiftly and repeatedly. Organization for Economic Cooperation and Development OECD defines globalization as "Spreading and deepening of companies' performance with the target to produce and sell goods or services on multiple markets (OECD,1993:73)". Later definition of globalization from OECD (OECD, 1994:55) says that "More precisely we may define globalization as a developing pattern of international business cooperation, which includes investments, trade and contractor ways of cooperation, and targets the development of products, production, procurement and marketing. Such kind of international performance enables the companies to conquer new markets, use their technological and organisational advantages and to lower the costs and risks." Globalization is thus strongly related with the increased mobility and competition. The most active subjects of the globalization process are transnational or multinational corporations. We may stipulate that the following characteristics are significant for their performance, especially if we take into consideration the multinational pharmaceutical companies:

- multinational pharmaceutical companies have had a strong market position on the most important and strategic world markets with holding of considerable market shares,
- they globally integrate and connect their business performance, so national identity is no longer important.
- they perform a flexible purchasing management strategy,
- have had a global network structure of production,

- have had a global network organisation of research and development activities,
- have built a global marketing organisation structure which supports a dedicated market orientation and a strategic priority focus to customers.

We may even emphasize that the globalization is in its core meaning a complex, market conditioned world process, which is related and driven by a whole palette of elements of marketing way of thinking and performing, sudden, fast changes and ever-changing ways of doing business, alongside an increasing competition and competitiveness, in a strive to optimally identify changing needs of the world customers and to ability to satisfy their long-term needs. We may say that it is very important to have in mind to know how to detect the needs of customers and how to satisfy them on a long-term basis. We may emphasize as well that the customers should be treated as the most precious value of a company. This is a way we underline that the globalisation is a market driven process. Thus in a process of the globalization it is core to be fast, to be strongly market oriented, to have loyal customers, to be innovative, to have proper knowledge, to be able to learn fast, to have proper information and to take quick decisions. Drucker (Drucker, 1992:86) mentioned five the most important elements of development which would influence greatly the strategies, structure and performance of future companies:

- " Economic relations would be performed in the direction among trade blocs instead of countries.
- business performance would be more and more matter of strategic alliancing, which would be integrated into a world economy,
- restructuring of business would be intensifying and more globalising, it would be important to have information and knowledge,
- strategic management of companies would be decisive for a competitive success,
- intensive market orientation of companies would be a core advantage for achieving a competitive advantage over competitors ".

We may underline that world pharmaceutical industry has been in the intensive processes of concentration and consolidation for a period of over last 15 years. We may argue that research & development, besides marketing and sales activities are two the most important and strategic priorities of pharmaceutical companies and into which the greatest part of funds having been invested as well. According to our research, we may say that the most important strategic reasons for the intensive consolidation processes of world pharmaceutical industry, are the following:

- fast globalization processes of world economy,
- lack of new products to drive sales growth further,
- big investments needed for R&D activities,
- global marketing and sales activities which need considerable investments as well.
- increased competitiveness,
- changed structure of the competitors,
- world reforms of the healthcare systems,
- increased importance of the regulatory issues (registrations, intellectual property rights, litigations).

According to our research study and findings, there have been more than 10,000 various alliances formed in the world pharmaceutical industry in the last decade (Datamonitor, 2005: 67). We have found out the consolidation processes have been carried out practically in all three sectors (inventive - original pharmaceutical companies, generic producers and specialists) of the world pharmaceutical industry. The concentration process has practically created brand new pharmaceutical players; however some previously well-known pharmaceutical firms have practically disappeared from the global market scenery. For example, the world leading pharmaceutical company Pfizer has been created from 6 big international players, including Pfizer itself, Warner Lambert, Upjohn, Searle and Pharmacia, and Wyeth, respectively. We may argue as well that the world pharmaceutical industry has become more and more oligopolistic indeed. We may entirely agree with Knickerbrocker theory of oligopolististic reaction (Knickerbrocker, 1973:69) which says, that "Oligopolistic companies, as minimizators of taking risks in avoidance of destroying effects of competition follow each other to new markets to protect their own interests. It is significant that the action of one player creates a reaction of the other competitors, an action creates a reaction and so the story of oligopolisation is going on." We may conclude that Knickerbrocker's theory perfectly illustrates and explains a consolidation process of the world pharmaceutical industry. Consolidation processes are continuing to speed up as the pharmaceutical companies try to follow their competitors' strategy of M&A (Mergers and Acquisitions) in endeavor to maintain their global market position and a long-term competitiveness.

It is thus evident that some stand-alone pharmaceutical companies are not able to satisfy long-term and ever-changing market needs and customers' expectations, to invest heavily into R&D and marketing activities in endeavor to bring new products to global markets and materialize them properly. We can argue that this process enables

pharmaceutical company's new development circles and their long-term development and growth. Formation of partnerships for a sake of the maintaining long-term competitiveness is today one of the most usable strategies in the world pharmaceutical industry. We may argue that pharmaceutical companies make alliances in endeavors to create common synergies and to better exploit their common assets, knowledge, product life cycles and moreover to upgrade marketing management strategies. Thus we may argue that the most important and strategic activities of creating common strategies for the pharmaceutical companies are:

- research and development (R&D), due to creating of brand new products,
- products, due to drive the sales growth and gain market shares,
- markets, due to create geographic and market expansion,
- marketing and sales, due to enforce marketing and sales activities to compete on the global markets and to drive further sales growth.

We may say as well that due to a complexity in the pharmaceutical industry it is not unusual at all the pharmaceutical companies even tend to form some partnerships and to compete at the same time. They can cooperate on some defined projects (for example R&D projects), however they compete strongly for particular market shares. We may define this is so called "C and C phenomena" as we may even call it "Co-opetition" (cooperation and competition at the same time) (Zineldin, 2004:45).

Pharmaceutical companies tend to internationalize and globalise their business activities sooner as in the past due to a market liberalisation, increased competitiveness and a need to reach considerable economies of scale.

Table 2: Overview of some alliances in 2006, 2007, 2008 and 2009

Target - taken-over company		Creating of synergies	
Schering AG, Germany	Bayer, Germany	R&D, markets, marketing&sales	
Serono, Switzerland	Merck KGaA, Germany	R&D, markets, marketing&sales	
Schwarz Pharma, Germany	UCB, Belgium	R&D, products, markets, marketing&sales	
Altana Pharma, Germany	Nycomed, Denmark	R&D, markets, products, marketing&sales	
Kos Pharmaceuticals, USA	Abbott, USA	R&D, products	
Organon BioSciences, the Netherlands	Schering- Plough, USA	R&D, markets, products, marketing&sales	
MedImmune, USA	AstraZeneca, UK	R&D,markets, products (vaccines), marketing&sales	
Merck Generics, Germany	Mylan, USA	markets, products, sales	
Wyeth, ÚSA	Pfizer, USA	R&D, markets, products, marketing&sales	
Genentech, USA	Roche, Switzerland	R&D, markets, products, marketing&sales	
Schering-Plough, USA	Merck&Co.,US A	R&D, markets, products, marketing&sales	
Orchid Chemicals&Pharm aceuticals, India	Hospira, USA	products, markets, sales	
ratiopharm, Germany	Teva, Israel	expand to European and world generic markets, products, sales	

Source: adapted from the companies' official published data

According to that Svetličič (Svetličič, 1996:59) stipulates that "Modern ways of the internationalisation with an aid of network formation and strategic alliances enable internationalisation without a growth of the companies. Today companies decide for internationalisation and alliances due to:

- be closer to customers,
- increase effectiveness,
- gain a better access to technologies and knowledge (know-how),
- protect them from competitors (strategic reasons)".

# Strategic elements in world pharmaceutical industry

World guru of management Drucker, who especially emphasized a core importance of the marketing way of thinking and marketing management for a successful, long-term highly competitive business performance of the companies, has said (Drucker, 1993:69) about globalization and globalization management the following properly: "In the future, there will be two types of top managers; those who would be able to think globally with a strong marketing management commitment and those jobless". Marketing-global way of thinking, performance management thus enables companies to put customers into the centre of all their business activities, and integrally focusing all business activities to a common and final goal - to be successful in satisfying customers' needs and to be better than competitors. It is worth to underline as well the importance of innovative management and the management of changes. As Bartlett and Ghosal underlined (Bartlett, Ghosal, 1989: 79), "Successful companies of today and tomorrow will be those ones, who would be able at the same time to satisfy local needs, increase global effectiveness and strive for a constant innovativeness and concomittant global learning".

It comes as a no surprise to us that successful companies, and they will be successful in the future as well with this strategic management practices, know how to satisfy their focused customers. We may even say that in a certain way concept of the strategic management clearly designates a company's business philosophy. We may entirely agree with Corstjens' estimation (Corstjens, 1991:.55) that "Sector of the pharmaceutical industry, despite being very specific in the all aspects, is an ideal case, how a practice and usage of the marketing management concept directly relates to a very successful business performance of this industrial sector".

According to our research work, we found out that the most important strategic reasons of creating common synergies for pharmaceutical companies are the following ones:

- research and development (R&D), due to creating of new products which form a sound base for further growth, development and competitiveness,
- products, due to driving sales growth and gain market shares,
- markets, due to creating geographic and market expansion,
- marketing and sales, due to enforcing marketing and sales activities to compete on global markets and to drive further sales growth.

These are, according to our researching, the most important reasons for strategic and increased consolidation development trends in world pharmaceutical industry.

## Findings and conclusions

The purpose of paper is to analyse which strategic issues are the most important for a considerable consolidation of world pharmaceutical industry. We have used a sum of public available data and information, predominantly on the business performance of world pharmaceutical industry, and the development trends within the pharmaceutical industry in our research work and we have found out that world pharmaceutical industry has been strongly concentrating and consolidating in the last years. We can say that two hypothesis raised at the beginning of our research can be confirmed. We provide empirical evidence that the intensive processes of concentration and consolidation have been continuing in all three sectors of world pharmaceutical industry. In aim to define these strategic changes clearly we have analysed in details the trends in world pharmaceutical industry. We may underline that intensive consolidation of world pharmaceutical industry is quite a complex process, having been driven by several factors and conditioned mostly by some defined strategic issues. We have found out that intensive globalization process has been definitively influencing and reinforcing a strong consolidation of world pharmaceutical industry. Further on, we may argue that increased competitiveness and amended structure of competitors which is conditioned by a merger and acquisition process. impact a strategic orientation of the particular world pharmaceutical companies. We have found out in our research survey that mergers and acquisitions prevail more and more as a viable strategic orientation for the world pharmaceutical companies. Further on, we may conclude that a fast consolidation of world pharmaceutical industry is definitively conditioned upon by several strategic reasons, like a lack of new products, an increased and fierce competitiveness, a fast globalization, a changed structure of competitors, and a tremendous fight for global market shares and customers' loyalty. We may argue that defined and stipulated strategic management issues are going to play even more important role in future globalization and concentration processes of world pharmaceutical industry which we may foresee to be intensively continued.

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