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Mergers And Corporate Inversions: The Case Of Pfizer

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Abstract
Pfizer carefully proposed two plans in 2014 and tried to negotiate for reducing the company's corporate tax rate and its further expansion into global markets. First it was through corporate conversion including a high profile merger plan for 100 $ billion with UK-based 'Astra- Zeneca' whereby the headquarters of the American pharmaceutical giant would be moved from New York to London. Another proposed agreement was through the merger with Ireland based 'Allegan'. Both proposals never took shape and were strongly criticized by the US Government, local communities, and various stakeholders. The company's experience highlights some of the problems that can arise in even the best- considered consolidations in the ever-changing pharmaceutical industry.
Keywords: *Pfizer, merger, global markets.*

1- INTRODUCTION

In the $1 trillion pharmaceutical and biotech industry, Pfizer has long been renowned for a robust research and development (R&D) department and an extensive product portfolio and has often enjoyed first-mover advantage (Yahoo Finance, 2016). Exhibit 1 offers a snapshot of the firm's financial performance from 2008 to 2015. In 2014, revenues from its top five drugs—Enrbrel, Lyrica, Prevnar, Lipitor, and Celebrex— surpassed $23.1 billion and constituted 50 percent of Pfizer's revenues (IMAP, 2015; King, 2014; Loo, 2014, 2015, 2016; Ratty, 2015, 2016). Sales surpassed $46.00 billion, with a profit of $8.99 billion and market value of $205.47 billion. In that same year, management decided to pursue a corporate inversion that would move its headquarters from New York to London.

Corporate inversions have become popular among multinational corporations (MNCs) seeking favorable tax rates and cost savings (Avi-Yonah & Marian, 2015; Capurso, 2016; DeAngelis, 2015; Gapper, 2016). Firms often pursue this strategy through mergers and acquisitions (M&As) to help them expand worldwide. Such arrangements may take the form of reverse triangular mergers, whereby a firm uses one of its subsidiaries to acquire another firm, in order to improve economies of scale (Kung, 2009). This is what Pfizer intended to do in its acquisition of Astra Zeneca. Not all such plans come to fruition, however. The experiences of the American pharmaceutical giant—which failed in merging with UK-based AstraZeneca in 2014 and then with Allergan of Ireland in 2015—offer a case in point.

2- A LOOK AT PFIZER'S EXTRAORDINARY GROWTH

Pfizer's corporate history encompasses scientific discoveries, unique entrepreneurial initiatives, and well- planned internationalization. Founded in 1849 by Charles Pfizer and Charles Erhart in Brooklyn, New York, Pfizer first began expanding when it started producing citric acid from sugar by using the process of mold fermentation. In 1906, com- pany sales surpassed $3 million. In

1928, Pfizer's researchers pursued the antibiotic properties of the penicillin mold, which led to a major breakthrough in medicine and put the company on secure financial footing. Subsequent accomplishments included the discovery of additional groups of antibiotics in the 1950s and 1960s, such as Terramycin (oxytetracy- cline) and Vibramycin (doxycycline hyclate), which made Pfizer a cash-rich company (Pfizer, 2015).

Exhibit 1. Selected Financial Data for Pfizer (2008–2015).

Variable	2008	2009	2010	2011	2012	2013	2014	2015
Sales ($mill)	48,296	50,009	67,809	67,425	58,986	51,584	49,605	46,000
Net profit ($mill)	8,026	8,621	8,266.	8,697	9,490	11,341	9,088	8,990
Net profit margin (%)	16.6	17.2	12.2	12.9	16.1	22	18.3	19.5
Operating margin (%)	45.9	46.2	45.5	48.6	52.2	53.1	46.5	48.0
Income tax rate (%)	17.0	20.3	11.9	31.5	21.2	27.4	25.5	26.0
Long-term debt ($mill)	7,963	43,193	38,410	34,931	31,036	30,462	31,541	29,000
Working capital ($mill)	16,067	24,445	31,859	29,659	32,796	32,878	36,071	35,000
Shr. equity ($mill)	57,556	90,014	87,813	82,190	81,260	76,307	71,301	70,000
Return on shr. equity (%)	13.9	9.6	9.4	10.6	11.7	14.9	12.7	13
Return on total cap. (%)	12.6	6.8	7.1	8.	9	11.2	9.4	9.5
Av. annual P/E ratio	16.4	12.8	16.3	17.6	18.4	17.6	21.5	NA
Earnings per share	1.18	1.23	1.03	1.11	1.26	1.65	1.41	1.45
Dividend declared/share	1.28	.80	.72	.8	.88	.96	1.04	1.12
Sales per share	7.16	6.2	8.46	8.9	8.11	8.06	7.89	7.4
Book value per share	8.52	11.15	10.95	10.84	11.16	11.92	11.33	11.3

Sources: Ratty, 2015; Pfizer, 2015.
Note: NA, not available.

In the 1980s, Pfizer saw its Feldene (piroxicam) become a leading anti-inflammatory medication, and in the 1990s, the company introduced Viagra (sildenafil citrate), which remains a blockbuster to this day. After Pfizer's merger with Warner-Lambert in 2000, the firm introduced an array of other profitable drugs that improved the lives of millions of consumers, including Geodon (ziprasidone hydro-chloride), Vfend (voriconazole), Relpax (eletriptan HBr), Caduet (amlodipine besylate and atorvastatin calcium), Sutent (sunitinib malate), Eraxis (anidu- lafungin), and Chantix (varenicline). These profit- able drugs burnished the company's reputation and helped Pfizer to remain a major MNC first-mover in the pharmaceutical industry.

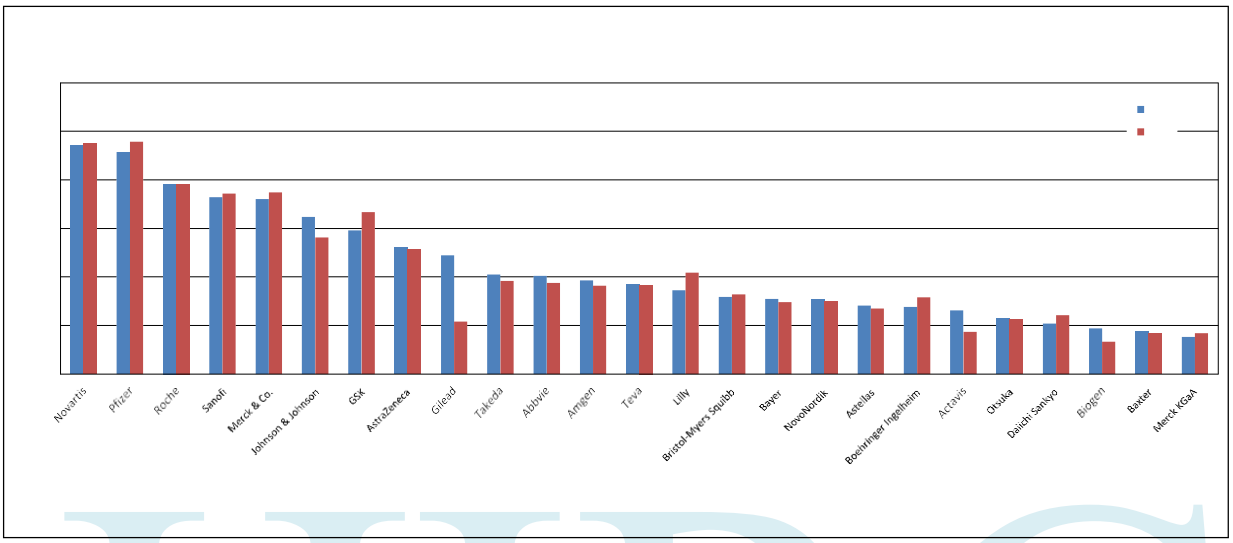
3- A FOCUS ON CORE COMPETENCIES IN AN EVER-GROWING INDUSTRY

Exhibit 2 and Exhibit 3 provide financial data for Pfizer and its major competitors. In 2014, the global pharmaceutical industry's sales stood at $1 trillion versus $947.6 billion in 2013. The industry's 40 percent growth was attributed to the development of oncology, autoimmune, respiratory, and antiviral drugs (Loo, 2016). Known for "high R&D intensity" (Wagner & Wakeman, 2016, p. 1091) and well-established portfolios and value chains, the industry comprises mostly large firms from North America and the European Union. Corporate profits and margins in the biotech sector are among the highest: at 84.9 percent (Loo, 2016).

The industry's top 30 drugs and their brand names and sales are listed in Exhibit 4 .The drugs in which Pfizer had a role were Enbrel ($8.3 billion), Lyrica ($4.6 billion), Prevnar ($4 billion), Lipitor ($3.3 billion), and Celebrex ($2.9 billion). AstraZeneca is represented on the list by Crestor ($5.6 billion). In many countries, pharmaceutical

companies deal with diverse markets, rigid "price regulation regimes," and other regulatory environments (Cockburn, Lanjouw, & Schankerman, 2016, p. 136). Global demographics trends, such as aging population, increased life expectancy, and rising occurrence of chronic diseases, are major factors behind the growth of the industry.

Exhibit 2. Top 25 Pharmaceutical and Biotech Firms by Global Sales



Despite technological advances, product development in the pharmaceutical and biotech industry remains costly and cumbersome: It can take more than $500 million to bring a major new drug to market. In managed care scenarios, healthcare providers have established various restrictions to control costs. Direct-to-consumer (DTC) advertising as well as social media have changed the industry and its worldwide markets by adding additional segments and consumers, resulting in additional revenues and growth. A multitude of strategic alli- ances, collaborative initiatives, and joint research programs have been implemented to avoid failures and foster industry growth and expansion (Khanna, Guler, & Nerkar, 2016; Hughes-Morgan & Yao, 2016). Some firms remain able to maintain hefty prices because of demand and niche segments (IMAP, 2015; PMLiVE, 2015). Most pharmaceutical firms maintain a secure market share over the long term because of steady consumer demand and advancements in medical treatment, which in turn lead them to aggressively invest in new technologies and products. Economic incentives, intellectual property rights, and regulatory environment all have an impact on the production of drugs (Anwar, 2008). Cross-licensing, comarketing, and R&D alliances are common in the industry. In the United States and Europe, the regulatory environment is controlled by government agencies that maintain strict rules and testing procedures.

Because of growth and increasing competition, mergers and acquisitions have become common-place in the industry (Anwar, 2008). Exhibit 5 lists notable M&As in the pharmaceutical industry between 1970 and 2015. Indus- try-specific clusters based on business and R&D activities are the norm. Well-established life sciences and biotech clusters, for example, can be found in Boston, Raleigh-Durham, San Francisco, San Diego, and Ontario.

Because of company size, which can determine good value, and high R&D costs, which typically leave smaller firms at a competitive disadvantage, pharmaceutical and biotech firms often prefer cross- national M&As. Rising costs, economic incentives, and the regulatory environment also have a significant impact on merger decisions.

Ever-increasing sales because of consumer demand and newmarkets in both developed and emerging markets also factor into these arrangements (Jack, 2006; Loo, 2014, 2015, 2016).

Exhibit 3. Financial Data of Selected Global Pharmaceutical and Biotech Firms (2008–2015)

Firm/Variable	2008	2009	2010	2011	2012	2013	2014	2015
Novartis (Switzerland)								
Sales ($million)	41,459	44,267	50,264	58,566	56,673	57,920	57,996	52,000
Net profit ($million)	8,163	8,454	9,969	9,245	9,618	9,292	10,727	9,870
Net profit margin (%)	19.7	19.1	19.8	15.8	17.0	16.0	18.5	19
Income tax rate (%)	14.1	14.8	14.8	14.2	14.5	13.4	12.6	13
Pfizer (US)								
Sales ($million)	48,296	50,009	67,809	67,425	58,986	51,584	49,605	46,000
Net profit ($million)	8,026	8,621	8,266	8,697	9,490	11,341	9,135	8,990
Net profit margin (%)	16.6	17.2	12.2	12.9	16.1	22.0	18.4	19.5
Income tax rate (%)	17.0	20.3	11.9	31.5	21.2	27.4	25.5	26
Sanofi (France)								
Sales ($million)	403,44	43,971	42,286	43,740	46,182	45,374	40,997	42,000
Net profit ($million)	61,97.8	7,889.3	7,216.4	7,777.5	6,907.5	5,956.9	5,329	5,785
Net profit margin (%)	15.4	17.9	17.1	17.8	15	13.1	13.0	13.8
Income tax rate (%)	29	23.1	22.2	20.4	19.1	17.9	20.4	25
Merck & Co. (US)								
Sales ($million)	23,850	27,428	45,987	48,047	47,267	44,033	42,237	39,700
Net profit ($million)	7,808.4	7,409.3	10,715	11,697	11,743	10,443	10,271	9,800
Net profit margin (%)	32.7	27	23.3	24.3	24.8	23.7	24.3	24.7
Income tax rate (%)	20.4	20	20	23.4	23.8	21.7	24.3	25
Johnson & Johnson (US)*								
Sales ($million)	63,747	61,897	61,587	65,030	67,224	71,312	74,331	71,000
Net profit ($million)	12,949	12,906	13,279	13,867	14,345	15,876	16,323	16,875
Net profit margin (%)	20.3	20.9	21.6	21.3	21.3	22.3	22	23.4
Income tax rate (%)	23.5	22	21.1	20.1	12.1	17.2	20.6	20
GlaxoSmithKline (UK)								
Sales ($million)	45,051	44,254	47,800	44,093	42,025	41,613	37,960	37,000
Net profit ($million)	8,717	9,802	2,872	8,788	7,543.0	8,836	4,671	3,600
Net profit margin (%)	19.3	22.1	6.0	19.9	17.9	21.2	12.3	9.7
Income tax rate (%)	29.2	28	41.3	32.1	29.1	15.3	4.6	20
AstraZeneca (UK								
Sales ($million)	31,601	32,804	33,269	33,591	27,973	25,711	26,095	24,000
Net profit ($million)	6,101	7,615.3	8,053	9,983	6,297	2,556	1,233	2,750
Net profit margin (%)	19.3	23.2	24.2	29.7	22.5	9.9	4.7	11.5
Income tax rate (%)	29.4	30.3	26.4	19.0	18	21.3	.0	20
Gilead Sciences (US)								
Sales ($million)	5,335.8	7,011.4	7,949.4	8,385.4	9,702	11,201	24,890	31,570
Net profit ($million)	2,011.2	2,635.8	2,901.3	2,803.6	2,591.6	3,074.8	12,101	16,760
Net profit margin (%)	37.7	37.6	36.5	33.4	26.7	27.4	48.6	53.1
Income tax rate (%)	26.5	24.7	25.9	23.2	28.3	26.9	18.5	23
Amgen (US)								
Sales ($million)	15,003	14,642	15,053	15,582	17,265	18,676	20,063	21,250
Net profit ($million)	4,196	4,931.7	4,937.2	4,787	5,085	5,815	6,698	7,400
Net profit margin (%)	28	33.7	32.8	30.7	29.5	31.1	33.4	34.8
Income tax rate (%)	20.1	16.7	19.1	10.4	13.3	6.1	6	19

(*continued*

Exhibit 3.Financial Data of Selected Global Pharmaceutical and Biotech Firms (2008–2015) (Continued)

Teva Pharmaceutical (Israel)								
Sales ($million)	11,085	13,899	16,121	18,312	20,317	20,314	20,272	19,400
Net profit ($million)	2,374	3,029	4,143	4,438	4,671	4,255	4,351	4,550
Net profit margin (%)	21.4	21.8	25.6	24.2	23.0	20.9	21.5	23.5
Income tax rate (%)	9.6	15.8	12.8	11.6	12.4	12.8	20.0	20
Eli Lilly (US)								
Sales ($million)	20,378	21,836	23,076	24,287	22,603	23,113	19,616	20,000
Net profit ($million)	4,398.6	4,851	5,239.5	4,913.5	3,784	4,502.6	2,987.6	3,630
Net profit margin (%)	21.6	22.2	22.7	20.2	16.7	19.5	15.2	18.2
Income tax rate (%)	21.5	21	22.6	20	22.8	19.2	19.2	19
Bristol-Myers Squid (US)								
Sales ($million)	20,597	18,808	19,484	21,244	17,621	16,385	15,879	15,980
Net profit ($million)	3,143	3,239	3,102	3,709	1,960	2,563	2,004	2,160
Net profit margin (%)	15.3	17.2	15.9	17.5	11.1	15.6	12.6	13.5
Income tax rate (%)	42.6	42.2	48.9	46.9	16.2	11.3	15.8	18
Novo Nordisk (Denmark)								
Sales ($million)	86,29.1	9,841.6	10,814	11,559	13,834	15,436	14,475	16,000
Net profit ($million)	1,827.1	2,074.8	2,562.8	2,978.6	3,800	4,651.5	4,316.4	5,130
Net profit margin (%)	21.2	21.1	23.7	25.8	27.5	30.1	29.8	32.1
Income tax rate (%)	24	23	21.2	22	22.9	22.6	22.3	21
Biogen (US)								
Sales ($million)	4,097.5	4,377.3	4,716.4	5,048.6	5,516.5	6,932.2	9,703.4	10,565
Net profit ($million)	7,83.2	9,70.1	1,005.3	1,234.4	1,380	1,862.3	2,453	3,750
Net profit margin (%)	19.1	22.2	21.3	24.5	25	26.9	30.2	35.5
Income tax rate (%)	31.8	26.7	18.3	27.9	25.6	24.9	25.6	25.5

*Johnson & Johnson: Consumer, pharmaceuticals, and medical devices and diagnostics. Pharmaceutical sales stood at $30.73 billion.

Source: Ratty, 2015; Value Line, 2015.

Note: Companies are listed by sales ranking in 2015.

The current diverse and highly competitive business environment makes the management of core competencies and global strategies challenging. Mainstream core competencies may include special skills, proprietary assets, brand equity issues, and well-managed market segments (Thompson, 2001). But these core competencies are always changing in response to competition and shifts in organizational structures. In cross-border M&As and foreign direct investment (FDI) initiatives, two areas seem to provide the most benefits to companies: read- ily available proprietary assets and infrastructural resources, and access to needed markets (UNCTAD, 2000). A summary of Pfizer's core competencies and global strategy follows.

4- PROFITABLE AND TRUSTED PORTFOLIO OF PRODUCTS

Pfizer is the second-largest pharmaceutical company after Novartis. In 2014, its pipeline of leading drugs included Enbrel, which is used to treat inflammatory conditions; Lyrica, for epilepsy, neuropathic pain, fibromyalgia, and generalized anxiety disorder; Prevnar, a pneumococcal vaccine; Lipitor, a lipid-lowering agent; and Celebrex, a non steroidal anti-inflammatory drug. As previously noted, these drugs generated $23.1 billion for the company, constituting 50 percent of its annual revenues. A well-known Fortune 500 company, Pfizer maintained a market

capitalization of $205.47 billion in 2015.

Exhibit 4.Top 30 Drugs in the Global Pharmaceutical/Biotech Industry (Sales: $2.6 Billion to $11 Billion; 2013

Rank	Brand Name	Technical Name	Manufacturer	Function	Global Sales (±%)*
1.	Humira	Adalimumab	Abbvie/Eisai	TNF inhibitor	$11.0 billion (+39%)
2.	Remicade	Infliximab	J&J/MSD	TNF inhibitor	8.9 (+0)
3.	Mabthera	Rituximab	Roche/Biogen Idec	CD20 antibody	8.6 (+27)
4.	Enbrel	Etanercept	Pfizer/Amgen	TNF inhibitor	8.3 (+13)
5.	Seretide	Fluticasone/ Salmeterol	GSK	Corticosteroid + b2-adrenergic receptor agonist	8.2 (+2)
6.	Abilify	Aripiprazol	Bristol-Myers Squid	Atypical antipsychotic	8.2 (+11)
7.	Lantus	Insulin Glargin	Sanofi	Insulin analogon	7.6 (+39)
8.	Avastin	Bevacizumab	Roche	Angiogenesis inhibitor	6.7 (+1)
9.	Herceptin	Trastuzumab	Roche	Her2-receptor antibody	6.6 (+11)
10.	Crestor	Rosuvastatin	AstraZeneca	HMG-CoA reductase inhibitor	5.6 (−15)
11.	Cymbalta	Duloxetine	Lilly	Serotonin-norepinephrine reuptake inhibitor	5.1 (+22)
12.	Spiriva	Tiotropiumbromid	Boehringer Ingelheim	Muscarinic receptor antagonist	4.7 (+7)
13.	Gleevec	Imatinib	Novartis	Tyrosin kinase inhibitor	4.7 (+1)
14.	Lyrica	Pregabalin	Pfizer	Binds voltage-dependent calcium channel inhibitor	4.6 (+24)
15.	Neulasta	Pegfilgrastim	Amgen	Granulocyte colony-stimulating factor	4.4 (−16)
16.	Copaxone	Glatiramer Acetate	Teva	Decoy for immune system	4.3 (+4)
17.	Lucentis	Ranibizumab	Novartis/Roche	Binds to endothelial factor	4.2 (+12)
18.	Januvia	Sitagliptin	MSD	Dipeptidyl peptidas-4 inhibitor	4.0 (+20)
19.	Prevnar	Pneumococcal Conjugate	Pfizer	Pneumococcal vaccine	4.0 (+9)
20.	Atripa	Emtricitabine/ tenofovir/ Efavirenz	Gilead	Reverse transcriptase inhibitor	3.6 (+13)
21.	Diovan	Valsartan	Novartis	Angiotensin II receptor antagonist	3.5 (−38)
22.	Lipitor	Atorvastatin	Pfizer/Astellas	HMG-CoA reductase inhibitor	3.3 (−70)
23.	Truvada	Tenofovir/ Emtricitabine	Gilead	Reverse transcriptase inhibitor	3.1 (+9)
24.	Avonex	Interferon Beta 1A	Biogen Idec	Activate immune system	3.0 (+12)
25.	NovoRapid/ NovoLoG	Insulin Aspart	Novo Nodisk	Insulin analogon	3.0 (+25)
26.	Celebrex	Celecoxib	Pfizer	COX-2 inhibitor	2.9 (+16)
27.	Alimta	Pemetrexed	Lilly	Folate antimetabolite	2.7 (+10)
28.	Micardis	Telmisartin	Boehringer Ingelheim/ Astellas	Angiotension II receptor antagonist	2.7 (−13)
29.	Zetia	Ezetimibe	MSD	Decreases cholesterol absorption in	2.7 (+9)

				the intestine	
30.	Humalog	Insulin lispro	Lilly	Insulin analogon	2.6 (+10)

Sources: IMAP, 2015; King, 2014.

Note: *±, % increase/decrease, compared with 2011 sales.

Exhibit 5. Selected M&As in the Global Pharmaceutical and Biotech Industries (1970–2015)

Year	Activity	Merging Companies (country of origin)	New Entity	Home Country
1970	Merger	Parke-Davis (US) and Warner-Lambert (US)	Parke-Davis Warner-Lambert	US
1987	Merger	Wyeth Laboratories (US) and Ayerst Laboratories (US)	Wyeth	US
1989	Merger	Bristol Myers (US) and Squibb (US)	Bristol Myers Squibb	US
1990	Merger	Rhône-Poulenc (France) and Rorer (France)	Rhône-Poulenc Rorer	France
1992	Merger	Sanofi (France) and Sterling Winthrop (US)	Sanofi Winthrop	France
1994	Acquisition	Amgen (US) acquired Synergum (US)	Amgen	US
1994	Merger	Roussel Laboratories (France) and Hoechst (UK)	Hoechst Roussel	UK
1995	Merger	Glaxo (UK) and Wellcome (UK)	Glaxo Wellcome	UK
1995	Merger	Rhône-Poulenc (France) and Fisons (France)	Rhone Poulenc	France
1995	Merger	Pharmacia (Sweden) and Upjohn (Sweden)	Pharmacia & Upjohn	Sweden
1995	Merger	Hoechst (UK) Marion Merrell Dow (US)	Hoechst Marion Roussel	UK
1996	Merger	Ciba-Geigy and Sandoz (Switzerland)	Novartis	Switzerland
1997	Acquisition	Amersham (UK) acquired Nycomed (Norway)	Amersham PLC	UK
1998	Merger	Rhône-Poulenc (France) and Hoechst (Germany)	Aventis	France
1999	Merger	Astra AB (Sweden) and Zeneca Group PLC (UK)	AstraZeneca	UK
1999	Merger	Sanofi Winthrop (Italy) and Synthelabo (France)	Sanofi Synthelabo	France
1999	Acquisition	Seton Scholl (UK) acquired London Int'l Gr. (UK)	SSL International	UK
2000	Merger	Pfizer (US) and Warner-Lambert (US)	Pfizer	US
2000	Merger	SmithKline Beckman (UK) and the Beecham Group (UK)	SmithKline Beecham	UK
2000	Merger	Glaxo (UK) and SmithKline Beecham (UK)	Glaxo SmithKline	UK
2000	Merger	Pharmacia & Upjohn (Sweden) and Searle (Sweden)	Pharmacia & Upjohn	Sweden
2000	Merger	Pharmacia & Upjohn (Sweden) and Monsanto (US)	Pharmacia	Sweden
2002	Acquisition	Amgen (US) acquired Immunex (US)	Amgen	US
2003	Acquisition	Pfizer (US) acquired Pharmacia & Upjohn (Sweden)	Pfizer	US
2004	Acquisition	Amgen (US) acquired Tularik (US)	Amgen	US
2004	Merger	Sanofi-Synthelabo (Italy) and Aventis (France)	Sanofi	France
2005	Acquisition	Novartis (Switzerland) acquired Hexal (Germany) and Eon Labs (US)	Novartis	Switzerland
2005	Acquisition	Teva Pharmaceutical (Israel) acquired Ivax (US)	Teva	Israel
2005	Acquisition	Pfizer (US) acquired Vicuron (Italy/US)	Pfizer	US
2005	Acquisition	Novartis acquired a portfolio of brands from Bristol-Myers Squibb	Novartis	Switzerland
2006	Acquisition	Gilead (US) acquired Myogen (US)	Gilead	US
2007	Acquisition	AstraZeneca (Sweden) acquired Medimmune (US)	AstraZeneca	UK/Sweden
2007	Acquisition	Schering-Plough (US) acquired Organon (Netherland)	Schering-Plough	US
2008	Acquisition	Roche (France) acquired Genetech (US)	Roche	France
2009	Acquisition	Pfizer (US) acquired Wyeth (US)	Pfizer	US
2009	Acquisition	Merck US) acquired Schering-Plough (US)	Merck	US
2010	Acquisition	Sanofi (Italy) acquired Genzyme (US)	Sanofi	France
2013	Acquisition	Amgen (US) acquired Onyx (US)	Amgen	US
2014	Acquisition	Novartis (Switzerland) acquired GlaxoSmithKline Oncology (UK)	Novartis	Switzerland
2014	Acquisition	Actavis (US) acquired Forest Laboratories (US)	Actavis	Ireland/US
2014	Acquisition	Bayer (Germany) acquired Merck & Co./consumer health	Bayer	Germany

		(US)		
2014	Acquisition	Medtronic (US) acquired Covidien (Ireland)	Medtronic	Ireland
2015	Acquisition	Teva Pharmaceutical (Israel) acquired Actavis (US)	Teva	Israel
2015	Acquisition	Endo International (Ireland) acquired Par Pharmaceutical (US)	Endo International	Ireland
2015	Acquisition	Actavis (US) acquired Allergan (Ireland).	Allergan	US/Ireland
2015	Acquisition	Pfizer (US) acquired Hospira (US)	Pfizer	US

Sources: Anwar, 2008; Royal Pharmaceutical Society of Great Britain, 2004; Standard & Poor's Industry Surveys in 2007; IMAP, 2015; King, 2014; Loo, 2015; company web sites; and various issues of the *Financial Times* and *The Wall Street Journal*.

5- R&D TOWARD MEANINGFUL INNOVATIONS

The company's core competencies are its aggressive growth and investment and strategic partner- ships in the industry. In 2015, Pfizer spent $7.5 billion on R&D versus Novartis's $9.3 billion. The company's continued growth and scientific innovations have enhanced its standing in the industry and global visibility. Like other firms, in some cases Pfizer has boosted its R&D activities by col- laborating with well-known niche organizations that attracted promising markets (Statista, 2015). These relationships included academic and global scouting partnerships and venture investments (Pfizer, 2015).

6- FIRM-SPECIFIC INTERNATIONALIZATION AND GLOBAL STRATEGIES

Pfizer is an active player in international operations, R&D facilities, and value chains. The company maintains offices and subsidiaries in numerous countries, mostly in Western Europe, North America, and Japan. Pfizer is also active in emerging markets, which are helping to fuel future growth.

7- THE QUEST FOR CORPORATE INVERSION

Home countries' hefty taxes and restrictions on MNC business operations lead firms to consider corporate inversions (Kun, 2004; Massoudi, Terazono, & Jopson, 2016; Seida & Wempe, 2004; Sheppard, 2003; Simpson, 2013). The emergence of global markets, fluctuations in consumer demand and multinational organizations' FDI activities have also led to heightened interest in this strategy. Reincorporating themselves in "tax havens" (Holtz- blatt, Jermakowicz, & Epstein, 2015, p. 33; Voget, 2011) or in countries where governments have lim- ited restrictions may force MNCs to move their headquarters to new locations (Cummings et al., 2010; Desai & Hines, 2002; Marples & Gravelle, 2015; Tootle, 2013; Webber, 2011; Wessel, 2014). Numerous researchers have addressed corporate inversions in terms of the federal laws they help spawn (Chiu, 2015, 717), "corporate migration" (Hwang, 2015), corporate profit shifting (Holtzblatt, Jermakowicz, & Epstein, 2015), and ethical considerations (Godar, O'Connor, & Taylor, 2005).

In many instances, MNCs have sought out trans- national or reverse triangular mergers whereby the acquiring MNCs establish new subsidiaries or entities and later have their agents in those organizations buy the target businesses. In this arrangement, the newly created subsidiaries are allowed to merge or become part of the target companies. This was the strategy that Pfizer intended to pursue in its acquisition of AstraZeneca in 2014—a strategy met with a chorus of criticism concerning job losses, weakened economic development, and expatriation of profits."The proposed takeover by Pfizer of AstraZeneca has engaged the public, enraged politicians, and triggered in some quarters a demand for legislation to frustrate foreign ownership," noted the *Financial Times* (Carr, 2014,p. 9). The US government as well as the local communities that would have been most affected by the relocation of Pfizer's R&D centers and headquarters were among the most vocal opponents. That heavy criticism was the main reason for the collapse of the merger.

Another article in the *Financial Times*, titled "Politicians Have the Treatment for Pfizer Syndrome," noted that the practice of corporate

inversion, "contributes to a corporate culture skewed to financial engineering. Buying and selling companies takes precedence over generating organic growth in the underlying businesses, which is where competitive advantage

Usually lies*"* (Plender, 2014, p.7). Because of "legal and ethical issues of corporate inversion" (Jeffers, 2014, p. 2), the US government initiated plans to overhaul its corporate tax system to reduce tax rates and pro- vide business with incentives to stay (Bogdanor, 2014; Graetz, 2014; McKinnon, 2015; McKinnon & Paletta, 2014).

The fear of job loss and the ripple effects of such loses on the local economy that result from corporate re- domiciling will continue to affect MNCs and their global strategies and expansion plans (Chamber & Catz, 2010; Devereux, 2013; Lynn, 2005; Mandel, 2008; Monga, 2011).

Although Pfizer ended up remaining in the United States, several other US-based MNCs relocated their headquarters abroad between 1983 and 2014, including Accenture, Chicago Bridge & Iron, Helen of Troy, Ingersoll-Rand, Tyco, and Xoma to Ber- muda; Fruit of the Loom, Seagate Technology, and Transocean to the Cayman Islands; and Covidien, Eaton-Cooper, and Medtronic to Ireland (Douglas-Gabriel, 2014).

After the failed combination of Pfizer and Astra- Zeneca, Pfizer pursued another merger with the Irish pharmaceutical firm Allergan in 2015, which was valued at $150 billion and intended to create the largest pharmaceutical company in the world. This time, Pfizer planned to move its headquarters to Dublin. Once again, opposition from the US government and negative publicity in the media led Pfizer's board of directors to drop its merger plans. Made in April 2016, that decision has forced Pfizer to reconsider its long-term global strategy for expansion. One possibility is that management may break up the company into two entities to seek operational efficiencies and future growth (Crow, 2016).

Pfizer's failed attempts at a merger with AstraZeneca and Allergan offer an important lesson: Even in an era of globalization in which organizations strive to maintain worldwide operational efficiencies, governments and the public at large still play a dominant role in companies' FDI and growth (Crow, 2016; Jopson, Crow, Fontanella-Khan, & Massoudi, 2016; Rockoff, 2016; Rubin, 2016). In the coming years, Pfizer will no doubt have to adapt to stay competitive in its industry, as it faces heightened competition in both North America and Europe from such competitors as Novartis, Sanofi, Merck, and GlaxoSmithKline.

8- WHAT LIES AHEAD?

Exhibit 6 gives an overview of the pharmaceutical and biotech industry's changing environment and leading trends. The following developments are likely to have a significant impact on Pfizer and the other leaders in its industry.

Taxes: Increasing tax burdens lead MNCs con- cerned with dwindling profits to consider corporate inversions (Chiu, 2015; Gottlieb, 2014; Houlder & Boland, 2014; Jopson & Hammond, 2014; Kennedy, 2015; McKinnon & Paletta, 2014; Massoudi et al., 2015; Rockoff, 2014; Sykes, 2014). At the same time, the leaders and general public in affected countries and regions fret over losing tax revenues, R&D centers, and jobs (Jackman & Tretiak, 2014; Mann, 2005; Marian, 2015) when corporations exit (Hwang, 2015). For some firms, however, moving headquarters to tax-friendly locations can be the only option to improve their financial health (Schmidt, Bates, & Paravano, 2015).

Specialization: The pharmaceutical sector has become crowded with niche companies that pursue specialized R&D and sell novel drugs. Size is a major factor in the industry and small firms are unable to compete because of high costs and scarce R&D resources. This brings competition and pressure on R&D and future drug portfolios.

Increased Competition: In the last ten years, pharmaceutical firms worldwide have witnessed intensified competition that has resulted in the erosion of their earnings. From Pfizer's point of view, competitors such as Novartis, Sanofi, Merck, GlaxoSmithKline, and Amgen are gaining ground. Coupled with high corporate taxes and country- specific restrictions on businesses, competitive challenges have forced many companies to seek M&As beyond their national borders to lower costs and achieve economies of scale.

High Cost of R&D: Growth and the adoption of new technologies in the pharmaceutical industry are expensive; it can take many years to realize sustainable competitive advantage. New financial re- sources and business models will be needed to help pharmaceutical firms achieve R&D efficiencies and continue their output of blockbuster drugs.

Infrastructure: Many pharmaceutical and biotech firms are located in the United States because of industry hubs, R&D clusters, and favorable infra- structure (DeVol, Wong, Ki, Bedroussian, & Koep, 2004; Feldman, 2003; Hendry & Brown, 2006; Porter, 2003). Infrastructure-related issues represent challenges in maintaining core competencies and hiring efficient and knowledgeable staff. Moreover, shareholders' investment agendas also focus on firms' infrastructure and growth potential.

Changing Demographics: The global pharmaceutical and biotech industry is expected to grow in selected markets because of increased consumer demand and to fall off in other sectors because of limited opportunities, lackluster R&D performance, and the increased reliance on generic, as opposed to brand- name, drugs (Loo, 2014, 2015, and 2016). In developed economies, the population is aging faster than it is in developing countries and emerging markets. This could create growth opportunities for MNCs but strain national healthcare systems. In the next ten years, the world population is expected to grow, mostly in the emerging markets and developing countries (Loo, 2014, 2015). Consequently, pharmaceutical firms will look to exploit opportunities in emerging markets and developing economies.

In the face of shifting and increasing competition, the pharmaceutical sector may witness additional large- scale transnational or reverse triangular mergers that could significantly alter the industry profile. While Pfizer remains a successful MNC, it will likely continue to explore the possibility of additional acquisitions and selected collaborations with other pharmaceutical and biotech companies. Because of its size, financial strength, and well-balanced product portfolio, analysts believe that Pfizer is in a good position to expand globally. The value and far-reaching effects of corporate inversions, which was brought to the fore by Pfizer's previous experiences, continues to be debated, both in the United States and abroad.

Exhibit 6. Global Pharmaceutical and Biotech Industry: Industry Environment and Trends (2014/2015)

Major Issues	Industry Environment & Trends
*Pharmaceutical market:	Total market in 2014: $1 trillion; mostly large firms in North America and European Union.
*Major brands and drugs:	In North America and the European Union, top eight companies offer best selling drugs. In 2013, these brands include Humira, Remicade, Mabthera, Enbrel, Seretide, Abilify, Lantus, Avastin, Herceptin, and Crestor.
*Global demographics and/major trends:	Aging of population, high life expectancy, and rising occurrence of chronic diseases are major factors behind the growth of the industry.

*Cost issues and time factors:	Product development is costly; may take over $500 million to $1 billion to bring a new drug to the market.
*Healthcare cost and managed care:	Various restrictions have been placed by healthcare providers to control cost.
*DTC (direct-to-consumer) ads:	DTC ads and social media have helped drug companies to seek advertising and sales.
*New products and industry performance:	Since 2010, new pharmaceutical firms have come to the market; increasing competition and M&As.
*R&D and new technologies:	R&D initiatives, alliances and joint research have helped the industry.
*Pricing and market characteristics:	Some drugs carry hefty prices; drug prices are mostly inelastic because of usage and high demand.
*Product life cycles issues:	Most drugs maintain a secure and long-term market share because demand and treatment procedures
*Industry profile:	Pharmaceutical companies aggressively invest in the areas of R&D and new technologies. Drugs are determined by economic incentives, intellectual property rights, and countries' regulatory environments. The industry is a high-risk industry. Activities such as in-licensing, co-marketing, and R&D alliances are common in the industry.
*Regulatory environment:	In the United States, FDA has strict rules and testing procedures; many drugs are not approved.
*Mergers and acquisitions:	In the last ten years, many M&As were sought in the industry; within the present business conditions and competitive environment, major consolidation are in the process.
*Industry-specific clusters:	The global pharmaceutical and biotech industry is structured on the basis of business and R&D clusters that help companies to cooperate and compete.
*Small versus large companies:	Company size often determines good value creation in the industry. Because of high R&D cost, small pharmaceuticals cannot compete.
*Future developments and trends:	Product development cost is a major issue along with economic incentives and regulatory environment. The pharmaceutical and biotech industry continues to be one of the largest in the world. Sales are going up along with R&D cost, consumer demand, and regulatory barriers.

Sources: Loo, 2014, 2015, 2016; Ratty, 2015, 2016; company websites; and various issues of the Financial Times, the New York Times, The Econ

9- REFERENCES

[1] Anwar, S. T. (2008). Creating a national champion or a global pharmaceutical company: A tale of French connection, Journal of Business and Industrial Marketing, 23(8),586–596.

[2] Arikan, A. M., & Stulz, R. M. (2016). Corporate acquisitions, diversification, and the firm's life cycle. Journal of Finance, 71(1), 139–194.

[3] Avi-Yonah, R. S., & Marian, O. (2015). Inversions and com- petitiveness: Reflections in the wake of Pfizer-Allergan. Inter- national Tax Journal, 41(6), 39–46.

[4] Bena, J., & Li, K. (2014). Corporate innovations and mergers and acquisitions. Journal of Finance, 69(5), 1923–1960.

[5] Bogdanor, A. (2014, May 29). The regulators were right to force Pfizer's hand. Financial Times, p. 9.

[6] Capurso, C. (2016). Burgers, doughnuts, and expatriations: Aa analysis of the tax inversion epidemic and a solution presented through the lens of the Burger King and Tim Hortons merger. William & Mary Business Law Review, 7(1), 579–607.

[7] Chamber, J., & Catz, S. (2010, October 20). The over- seas profits elephant in the room. The Wall Street Journal, p. A19.

[8] Chiu, D. (2015). Inversion subversion: Corporate inversions and the new federal laws against them. Fordham Journal of Corporate & Financial Law, 20(3), 717–743.

[9] Cockburn, I. M., Lanjouw, J. O., & Schankerman, M. (2016). Patents and the global diffusion of new drugs. American Eco- nomic Review, 106(1), 136–164.

[10] Crow, D. (2016, May 4). Pfizer considers break-up to cut taxes. Financial Times, p. 14.

[11] Cummings J. et al., (2010). Growth and competitiveness in the United States: The role of its multinational companies. New York: McKinsey Global Institute.

[12] DeAngelis, S. (2015). If you can't beat them, join them: The U.S. solution to the issue of corporate inversions. Vanderbilt Journal of Transnational Law, 48(5), 1353–1384.

[13] Desai, M. A., & Hines, J. J. (2002). Expectations and expa- triations: Tracing the causes and consequences of corporate inversions. National Tax Journal, 55(3), 409–440.

[14] Devereux, M. (2013, May 23). How we can make global companies pay their fair share of tax. Financial Times, p. 11.

[15] DeVol, R., Wong, P., Ki, J., Bedroussian, A., & Koepp, R. (2004). America's biotech and life science clusters: San Die- go's position and economic contribution. Santa Monica, CA: Milken Institute.

[16] Douglas-Gabriel, D. (2014). These are the companies aban- doning the U.S. to dodge taxes. The Washington Post, (August6). Retrieved from https://www.washingtonpost.com/news/ wonk/wp/2014/08/06/these-are-the- companies-abandoning- the-u-s- to-dodge- taxes/ [accessed on May 30, 2016].

[17] Godar, S. H., O'Connor, P. J., & Taylor, V. A. (2005). Evaluating the ethics of inversion. Journal of Business Ethics, 61(1), 1–6.

[18] Feldman, M. (2003). The locational dynamics of the U.S. biotech industry: Knowledge externalities and the anchor hypotheses, Industry and Innovation, 10, 311–328.

[19] Gapper, J. (2016, January 7). Stateless companies play a risky game. Financial Times, p. 7.

[20] Gottlieb, S. (2014, April 30). A biotech lessons for big pharma mergers. The Wall Street Journal, p. A15.

[21] Graetz, M. J. (2014, September 26). The bipartisan inversion evasion. The Wall Street Journal, p. A13.

[22] Hendry, C., & Brown, J. (2006). Organizational network- ing in UK biotechnology clusters, British Journal of Manage- ment, 17, 55–73.

[23] Holtzblatt, M., Jermakowicz, E. K., & Epstein, B. J. (2015). Tax heavens: Methods and tactics for corporate profit shift- ing. International Tax Journal, 41(1), 33–44.
[24] Houlder, V., & Boland, V. (2014, April 30). The Irish inver- sion. Financial Times, p. 9.
[25] Hughes-Morgan, M., & Yao, B. E. (2016). Rent Appropria- tion in strategic alliances: A study of technical alliances in pharmaceutical industry. Long Range Planning, 49, 186–195.
[26] Hwang, C. (2015). The new corporate migration. BrooklynLaw Review, 80(3), 807–856.
[27] IMAP. (2015). Global M&A Report: Pharma/Biotech 2015. Chicago, IL: IMAP.
[28] Jack, A. (2006, October 5). One pill makes you larger: A wave of pharma mergers as new drug costs soar, Financial Times, p. 13.
[29] Jackman, P., & Tretiak, P. (2014). Notice 2014-52: IRS attempts to shut the door on inversions. International Tax Journal, 40(6), 27–36.
[30] Jeffers, A. E. (2014). Legal and ethical issues of corporate tax inversions. Ethics & Critical Thinking Journal, (3), 2–26.
[31] Jopson, B., & Hammond, E. (2014, July 23). U.S. warned of up to 25 groups eyeing foreign switch to cut taxes. Financial Times, p. 1.
[32] Jopson, B., Crow, D., Fontanella-Khan, J., & Massoudi, A. (2016, April 7). Collapse pf Pfizer-Allergan deal sends shock- waves through US. The Wall Street Journal, p. 1.
[33] Kennedy, J. (2015, July 1). Behind the foreign shopping spree for U.S. companies. The Wall Street Journal, p. A13.
[34] Khanna, R., Guler, I., & Nerkar, A. (2016). Fail often, fail big, and fail fast? Learning from small Failures and R&D performance in the pharmaceutical industry. Academy of Management Journal, 59(2), 436–459.
[35] King, S. (2014). FirstWord lists – the 20 largest pharma M&A deals. May 18. Retrieved from http://www.firstword-pharma.com/node/1211072#axzz3o5VVUvjm [accessed on October 9, 2015].
[36] Kun, O. (2004). Corporate inversions: The interplay of tax, corporate and economic implications. Delaware Journal of Corporate Law, 29(2), 313–375.
[37] Kung, S. D. (2009). The reverse triangular merger loophole and enforcing anti assignment. Northwestern University Law Review, 103, 1037–1066.
[38] Loo, J. (2014). Industry surveys: Healthcare, pharmaceuti- cals, New York: S&P Capital IQ. [39] Loo, J. (2015). Industry surveys: Pharmaceuticals, New York: S&P Capital IQ.
[40] Loo, J. (2016). Industry surveys: Biotechnology, New York: S&P Capital IQ.
[41] Lynn, B. C. (2005). End of line: The rise and fall of the global corporation. New York: Currency Doubleday.
[42] Mann, J. (2005). Corporate inversions: A symptom of a larger problem, the corporate income tax. Southern Califor- nia Law Review, 78(2), 521–557.
[43] Mandel, M. (2008, March 10). Multinationals: Are they good for America? Business Week, pp. 41–46.
[44] Marian, O. (2015). Home country effects of corporate inver- sions. Washington Law Review, 90(1), 1–73.
[45] Marples, D. J., & Gravelle, J. G. (2015). Corporate expa- triation, inversions, and mergers: Tax issues, (November 30), Washington, DC: Congressional Research Service.
[46] Massoudi, A., Fontanella-Khan, J., & Jopson, B. (2015, August 7). Blow for U.S. push against tax-cut moves as groups seal Europe deals. Financial Times, p. 1.
[47] Massoudi, A., Terazono, E., & Jopson, B. (2016, May 24). Tax inversion crackdown

scuppers $8 billion fertilizer tie-up. Financial Times, p. 13.
[48] McKinnon, J. D. (2015, July 22). Talks eye overseas taxation overhaul. The Wall Street Journal, pp. A1&A4.
[49] McKinnon, J. D., & Paletta, D. (2014, September 23). U.S. moves to deter firms fleeing taxes. The Wall Street Journal, pp. A1&A2.
[50] Monga, V. (2011, October 5). Companies' $2 trillion conun- drum. The Wall Street Journal, p. B5.
[51] Pfizer. (2015). Timeline of Pfizer. Retrieved from http://www. pfizer.com/about/history/timeline [accessed on October 2, 2015].
[52] Plender, J. (2014, May 13). Politicians have the treatment for Pfizer syndrome. Financial Times, p. 7.
[53] PMLiVE. (2015). Top 25 pharma companies by global sales. Retrieved from http://www.pmlive.com/top_pharma_list/ global_revenues [accessed on October 10, 2015].
[54] Porter, M. E. (2003). The economic performance of regions, Regional Studies, 37(6/7), 549–578.
[55] Ratty, M. (2015). Pfizer, Inc. Value Line, July 10. New York: Value Line, Inc.
[56] Ratty, M. (2016). Pfizer, Inc., Value Line, April 8. New York: Value Line, Inc.
[57] Rockoff, J. D. (2014, April 29). Why Pfizer is hungry for deal. The Wall Street Journal, pp. B1&B2. Rockoff, J. D. (2016, April 7). Pfizer, Allergan move on. The Wall Street Journal, pp. B1&B2.
[58] Royal Pharmaceutical Society of Great Britain. (2004). Merg- ers and takeovers within the pharmaceutical industry, March. Retrieved from www.rpsgb.org/in [accessed March 2006].
[59] Rubin, R. (2016, April 13). Tax-rule changes ripple widely. The Wall Street Journal, pp. A1&A10.
[60] Schmidt, P. M., Bates, J. D., & Paravano, J. H. (2015). Why tax inversions continue to be an effective global tax planning strategy. Journal of Taxation of Investments, 32(2),3–9.
[61] Seida, J. A., & Wempe, W. F. (2004). Effective tax rate changes and earnings stripping following corporate inver- sion. National Tax Journal, 57(4), 805–828.
[62] Sheppard, H. E. (2003). Fight or flight of U.S.-based multi- national businesses: Analyzing the causes for, effects of, and solutions to the corporate inversion trend. Northwestern Journal of International Law & Business, 23(3), 551–588.
[63] Simpson, J. (2013). Analyzing corporate inversions and pro- posed changes to the repatriation rule. New York University Annual Survey of American Law, 68(3), 673–728.
[64] Standard & Poor's Industry Surveys. (2007). Healthcare: Phar- maceuticals, May 10. New York: Standard & Poor's, 1–58.
[65] Statista. (2015). Facts on pharmaceutical industry worldwide. Retrieved from http://www.statista.com/topics/1764/global - pharmaceutical-industry/ [accessed on October 9, 2015].
[66] Sykes, R. (2014, May 6). Ownership is irrelevant in the global pharma race. Financial Times, p. 7.
[67] Thompson, J. L. (2001). Understanding corporate strategy, London, UK: Thompson Learning.
[68] Tootle, J. A. (2013). The regulation of corporate inversions and 'substantial business activities'. Virginia Tax Review, 33(2), 353–391.
[69] UNCTAD. (2000). World Investment Report 2000: Cross Bor- der Mergers and Acquisitions and Development - Overview. New York: United Nations.
[70] Value Line. (2015). Various companies. New York: Value Line, Inc. Retrieved from https://research.valueline.com/secure/ Voget,
[71] J. (2011). Relocation of headquarters and interna- tional taxation. Journal of Public Economics, 95(9/10), 1067–1081.

[72] Wagner, S., & Wakeman, S. (2016). What do patent-based measures tell us about product commercialization? Evidence from the pharmaceutical industry. Research Policy, 45,1091–1102.
[73] Webber, S. (2011, July 25). Escaping the U.S. tax system: From corporate inversions to re-domiciling. Tax Notes Inter- national, pp. 273–295.
[74] Wessel, D. (2014). Epitaph for the corporate income tax, Brookings, (June 30). Retrieved from http://www.brookings.edu/research/opinions/2014/06/30-epitaph-corporate- income-tax-wessel [accessed on March 11, 2016].
[75] Yahoo Finance. (2016). Pfizer Inc.: Profile. Retrieved from http://finance.yahoo.com/q/pr?s=PFE+Profile [accessed].