

ACCESS DENIED

REPUTATION EFFECTS OF LIMITING
ACCESS TO ARV DRUGS



Master Business-Society Management: Research Theme I

International Business, Institutions and Public-Private Partnerships (BKM02BS)

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Executive Summary

Corporate reputation is the estimation in which a company is held by all of the company's stakeholders. It attracts not only consumers but also people who want to invest in and work for the company. The pharmaceutical industry has for many years been concerned with this aspect of business, and in recent times, it has become even more crucial in maintaining stakeholder value. One such issue that has brought reputation to the forefront of attention is that of global access to antiretroviral medicines (ARVs), used to treat HIV and AIDS.

Pharmaceutical companies have been condemned for excessive pricing through patent strategies, which limits access to these drugs in areas where the disease is most prevalent: developing countries. Over the last ten years, the media has focused heavily on events relating to the industry's ARV patent strategies. Correlations between key events pertaining to patent strategies, and trends in the capital, consumer and labour market provide a valuable insight into the influence that patent strategies relating to ARV medicines, have on the reputation of pharmaceutical companies

This study has analysed the seven key players in the pharmaceutical industry with regard to ARVs. By analysing stock markets, investment funds, solvency and prime reputation indicators of capital markets, this study reveals some of the positive and negative effects of the companies' patent strategies. An analysis of pharmaceutical industry employees shows how knowledge workers are affected by their company's reputation and how concerned they are with regard to corporate social responsibility, both within industry and across markets. The interaction between companies' reputations and consumer markets is also examined. An explanation can be sought in the origins and market characteristics of each company.

In response to the growing importance of corporate social responsibility issues (such as that of facilitating access to essential medicines), players within the pharmaceutical industry have individually drawn up codes of conduct and policies to address concerns, and guide 'responsible' corporate activity. Lack of regulatory governance has meant that the content, quality and reporting structures of these codes and policies vary significantly between companies. This calls for an internationally recognised industry specific framework, which some have suggested should be based on that of the Global Reporting Initiative. It also calls for a framework in which the market, state and civil society sphere can act upon their responsibilities in providing access to ARVs.

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Abbreviations

AAI	Accelerated Access Initiative
ABI	Associate of British Insurers
AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral Therapy
ARV	Antiretroviral
CSR	Corporate Social Responsibility
DSI400	Domini 400 Social Index
DJSGI	Dow Jones Sustainability Group Index
DONGOS	Discussion and Dialogue Oriented NGOs
DSB	WTO Dispute Settlement Body
EU	European Union
HIV	Human Immunodeficiency Virus
MSF	Medicins Sans Frontieres
NGO	Non Governmental Organization
PSG	Pharmaceutical Shareholders Group
PwC	PricewaterhouseCoopers
R&D	Research and Development
STRONGOS	Strategic Stakeholder Oriented NGOs
SUNGOS	Supervisory NGOs
TRIPS	Trade-Related Aspects of Intellectual Property Rights
UK	United Kingdom
UNAIDS	United Nations AIDS
UNICEF	United Nations International Children's Fund
USA	United States of America
WHO	World Health Organization
WTO	World Trade Organization

1 Introduction

1.1 Background

Development and distribution of AIDS and HIV

In 1981, the first case of AIDS was diagnosed. This was the start of what has been described as “a new type of global emergency” (UNAIDS/WHO, 2004:7). In just over 20 years, more than 20 million have died from AIDS. The number of people living with HIV/AIDS has been steadily increasing since 1990 from an estimated 10 million people to an estimated 38 million people as of the end of 2003 (UNAIDS/WHO, 2004:9-11).

Table 1 summarises the distribution of global estimates of AIDS and HIV at the end of 2003. The disease is most prevalent in Sub-Saharan Africa, where two-thirds of those with HIV live, despite the fact that just over 10% of the world’s population are located here.

TABLE 1: Distribution of global estimates of AIDS and HIV at the end of 2003

Area	Estimate
South Africa & South-East Asia	6 500 000
Latin America	1 600 000
Eastern Europe & Central Asia	1 300 000
North America	1 000 000
East Asia	900 000
Western Europe	580 000
North Africa & Middle East	480 000
Caribbean	430 000
Oceania (Australian regions)	32 000

(Source: UNAIDS/WHO, 2004)

Antiretroviral therapy

At present, no cure has been developed for AIDS. Antiretroviral (ARV) medicines that have been developed since the mid 1990s have the ability to prolong life significantly and reduce the physical effects of the infection. Worldwide, five to six million people are in need of access to antiretroviral therapies (ART). However, in low and middle income countries, those who do have access is estimated at only 7% (UNAIDS/WHO 2004). In those countries where there has been wide availability, a dramatic reduction in HIV-related illnesses and death has been observed.

Various causes attribute to the lack of access. Insufficient health infrastructures, lack of health education and the high cost of ARV medicines are some of the most commonly cited reasons (Topouzis and van Wijk, 2004: 1).

1.2 Context problem

Patents, pharmaceuticals and antiretrovirals

Intellectual property legislation allows a limited monopoly for companies owning a patent. “Profitability of many of the largest pharmaceutical companies depends on a handful of products.” (Ambrosini et al. 1998:66). Increasing competition and a number of challenges such as growing

research and development (R&D) expenditure, have made ownership over patents and trademarks a powerful source of competitive advantage, for example in price setting and production distribution (Topouzis and van Wijk 2004). Pharmaceutical companies argue that the high cost of R&D, which was estimated at US\$802 million per new drug in 2000 (Cookson, 2002) makes it difficult to provide affordable medicines to developing countries. These costs are recuperated through patents that prevent other pharmaceutical companies from producing and providing cheaper generic forms of the branded drug.

The world market for branded ARV medicines consists of approximately 20 ARVs. The top 10 branded ARVs combined account for a market share of 86%. The patents of 17 branded ARVs (including the top 10) are held by 7 firms, all of whose headquarters are located in developed countries (Topouzis and van Wijk 2004; Coriat et al., 2003). The ARV market is oligopolistic.

'Worldwide' intellectual property protection

In 1994, the World Trade Organisation (WTO) Uruguay Round resulted in, among other things, the signing of the TRIPS (Trade-Related Aspects of Intellectual Property Rights) agreement. This agreement "aimed at extending worldwide the type of intellectual property protection that had up until that point been granted to firms established in the most developed countries." (Coriat et al., 2003)

"While TRIPS does offer safeguards to remedy negative effects of patent protection or patent abuse, in practice it is unclear whether and how countries can make use of these safeguards when patents increasingly present barriers to medicine access." ('t Hoen, 2003)

A reputation problem

The establishment of the WTO's TRIPS on one hand and the development and distribution of AIDS is a coincidence. However, these issues have become intertwined (Coriat et al., 2003). Pharmaceutical companies have repeatedly been blamed and criticized for the expanding crisis, which was demonstrated for example in the 1998-2001 South African trade dispute (see also section 2) ('t Hoen, 2003). Media attention and activist organisations have been particularly focused on controversies surrounding access to AIDS/HIV treatments. It has not just been particular companies experiencing reputation risk, but the industry as a whole (Nissan, 2004).

1.3 Research Question

The focus of this research is directed at trying to identify a link between the patent strategy of pharmaceutical companies who are involved in the research and development (R&D) of ARV drugs, and their reputation. Since patented research and products in theory create a limited monopoly where companies can set prices accordingly, we will view price strategy as an extension on patent strategies. The focus will be on the top seven pharmaceutical companies involved in ARV R&D, analysing their reputation over the last 10 years. The research question is as follows:

<p>What influence do patent strategies relating to ARV drugs, have on the reputation of pharmaceutical companies?</p>
--

1.4 Methodology explanation

AIDS and HIV is the most widely researched infectious disease in history (UNAIDS/WHO 2004: 17). Given the volume of research into the global situation, there will be no focus on the key facts and figures of the disease. Patent strategy is in this context defined as the actions taken by a company with regard to research protection, licensing, patent infringement, and donations and price setting of ARV drugs. The seven chosen companies are Abbott Laboratories, Boehringer Ingelheim, Bristol-Myers Squibb, GlaxoSmithKline, Roche, Merck, and Pfizer. In the R&D of AVR medicines, these are the key players in the industry, and are collectively responsible for producing the top 10 HIV Antiviral Products in terms of global sales¹.

The basis of this research will be the construction of a timeline showing key events (relating to ARV medicines and the actions of the seven pharmaceutical companies) in the media in units of days, months and years, over a ten-year period beginning in 1994. The reputable and reliable sources such as the Financial Times but also company's press releases will be used. Reputation effects will be examined in three dimensions; Capital Market, Labour Market and Consumer Market (van Tulder and van der Zwart, 2003: 148-156).

1.5 Relevancy

Businesses are already suffering significant consequences in those areas where the disease is prevalent. This reports shows the importance of corporate communication with regard to stakeholders in the consumer market, capital market and labour market. It also shows how businesses could act upon its responsibilities together with governments and partners in the civil society.

1.6 Structure of this report

Finally, the research will be structured into the framework of the reflective circle to effectively determine the nature of the problem, the effects (focusing on reputation), the solutions (focusing on the actions of seven pharmaceutical companies), implementation, and evaluation. Section 2 describes the root issue. It provides a timeline of key events and an insight in the stakeholders, forming a framework for the following sections. Section 3 focuses on the contribution of firms to the problem and the reputation effects. The stance of other stakeholders is also diagnosed. In section 4, the proposed solutions of the issue are analysed. Section 5 focuses on the implementation of these solutions. Finally, in section 6 there will be an evaluation and a look at steps in the future.

¹ based on pharmacy markets in the U.S., Canada, Germany, Italy, France, Spain, U.K., Brazil, Mexico, Argentina, Australia, New Zealand, Japan (IMSHealth, 2002)

2 Problem Definition

2.1 Introduction

This section focuses on the nature of the problem. An overview of key-events, primary stakeholders and an issue analysis will be presented.

2.2 Theory: issues

Issues

Issues are unregulated social topics, awaiting settlement, about which an expectancy gap exist. The expectancy gap could be a factual gap (doubt about facts which underlie the issue), a conformance gap (doubt about how to deal with the issue) or ideals gap (inconsistency of norms and values). Ultimately an expectancy gap could result in controversy around the behaviour of a company, which, in turn, could impact the reputation of a company. An issue will continue to exist without imperative rules and regulation closing the expectancy gap. Social issues become important for companies when it has an impact on their reputation. This impact depends on whether and when issues get attention in society. Issues generally evolve in five stages: birth, growth, development, maturity and post-maturity. (van Tulder en van der Zwart, 2003).

2.3 The nature of the problem: in need of antiretroviral therapy

Over past years, high prices of ARVs were seen as one of the main access barriers to ART in developing countries. High drug prices were a result of patents, limited volume, limited price competition, high import duties, tariffs and local taxes, high mark-ups for wholesaling, distribution and dispensing, and individual country pricing strategies (WHO, UNICEF, UNAIDS, MFS; 2002). Now, due to competition from generic manufacturers and public pressure, prices of ARVs have been reduced and donations by pharmaceutical companies increased (WHO, UNICEF, UNAIDS, MFS; 2002). Pharmaceutical companies use at the same time, differential pricing strategies, applying their “own criteria for countries, sectors and institutions that may benefit from reduced price [or donations]” (WHO, UNICEF, UNAIDS, MFS; 2003). Although access to ART has increased during the past years (WHO, UNICEF, UNAIDS, MFS; 2004), there are still enormous amounts of people in developing countries in need of access to ART (see table 2).

TABLE 2: Coverage of adults in developing countries with ART in 2003, by World Health Organisation (WHO) region

WHO Region	Number of people using ART	Number of people needing ART	Coverage %
Africa	100 000	4 400 000	2
Americas	210 000	250 000	84
Europe (eastern Europe, central Asia)	15 000	80 000	19
Eastern Mediterranean	5 000	100 000	5
South-East Asia	60 000	900 000	7
Western Pacific	10 000	170 000	6
All WHO regions	400 000	5 900 000	7

(Source: WHO, 2003: 428)

2.4 Issues 1994-2004

Timeline

The following timeline (see box 1) gives a quick overview of key events during the period 1994-2004 relating to the access to ARV drugs. A more comprehensive view of the seven pharmaceutical companies' patent strategies during this period is available in appendix I.

BOX 1: Timeline key events 1994-2004

1994	- Signing of the WTO TRIPS agreement. ('t Hoen, 2003)
1996	- Arrival of tritherapy treatments and patenting of all ARV drugs in the developed countries. (Dumoulin et al., 2003).
1998	- The South African Pharmaceutical Manufacturers Association and 39 pharmaceutical manufacturers file a lawsuit against the government of South Africa "alleging that the Medicines and Related Substances Control Amendment Act No. 90 of 1997 violated TRIPS and the South African constitution" ('t Hoen, 2003; Pharmaceutical Shareowners Group, 2004). The United States and the European Commission supports 'their' manufacturers and pressure South Africa to repeal this amendment. ('t Hoen, 2003) - Brazil's comprehensive AIDS care, including universal access to ARV medicines, and initiatives in Thailand become a thorn in the flesh of the United States ('t Hoen, 2003, Dumoulin et al., 2003) - Donations from the French government, companies and negotiated special prices start HIV/AIDS treating initiatives focused on sub-Saharan Africa. (Dumoulin, 2003)
1999	- Prior to the elections, increased public pressure forces the United States to change its policies with regard to the trade dispute in South Africa. ('t Hoen, 2003)
2000	MAY - Multinational companies cut prices and increase donations due to the fast rise of generic manufacturers in India who offer prices far lower than those of the multinational companies (Dumoulin et al., 2003).
2001	MAY - The South African Pharmaceutical Manufacturers Association and 39 pharmaceutical manufacturers drop the case against the South African government due to lack of support from home governments and international public pressure. ('t Hoen, 2003) JUN - Start of action against Brazil by the United States at the WTO Dispute Settlement Body. Mid 2001, the United States withdraws after being under fierce pressure from NGO's. ('t Hoen, 2003) NOV - Signing of the Doha Declaration at The Fourth WTO Ministerial Conference held in Doha, Qatar. "This declaration on TRIPS and Public Health affirms the sovereign right of governments to take measures to protect public health. It gives primacy to public health over private intellectual property, and clarified WTO Members' rights to use TRIPS safeguards." ('t Hoen, 2003)
2002	DEC - Foundation of the Global Fund to Fight AIDS, Tuberculosis and Malaria. The WTO reaches no agreement upon import licenses. (Dumoulin et al., 2003)
2003	"Announcement of WHO's '3 by 5' initiative of providing ARV treatment to 3 million in development countries by the end of 2005" (WHO, UNICEF, UNAIDS, MFS; 2004)
2004	Philanthropist donations (Financial Times)

Stakeholders

The key events show numerous conflicts between and within societal spheres involving the following primary stakeholder groups (see figure 1).

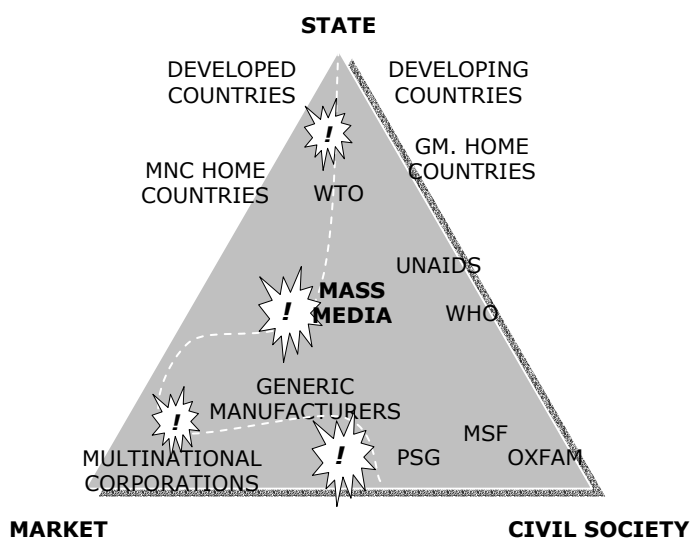
Primary stakeholders

The market sphere consists of multinational pharmaceutical corporations who produce the ARVs, and generic manufacturers who copy the original medicines. The sphere of the state consists of governments of home countries of generic manufacturers, other developing countries, home countries of multinational pharmaceutical corporations and other developed countries. It also consists of intergovernmental organizations like UNAIDS, World Health Organization and United Nations International Children's Fund (UNICEF). The civil society consists of Non Governmental Organisations (NGO) particularly Medecins sans Frontieres and Oxfam.

Secondary stakeholders

The Pharmaceuticals Shareowners Group (PSG) is an international group of institutional investors.

FIGURE 1: Stakeholders and interface conflicts relating to need of access to ARV drugs



Issue analysis

Figure 2 presents the issue lifecycle.

Birth of an unregulated social topic

The signing of TRIPS is the birth of the issue. TRIPS were developed in order to align the protection regimes of all countries across the world. TRIPS also allows for disputes regarding breaches of the TRIPS agreement to be settled at the WTO Dispute Settlement Body (DSB). However, the agreement lacks clear rules and regulation on how countries could make use of the

“included safeguards when patents increasingly present barriers to medicine access” (t Hoen, 2003).

Pharmaceutical companies in developed countries seized the opportunities caused by the advantages and deficiencies of TRIPS creating the foundation for an unregulated social topic awaiting settlement.

Growth of an ideals gap, development of a controversy

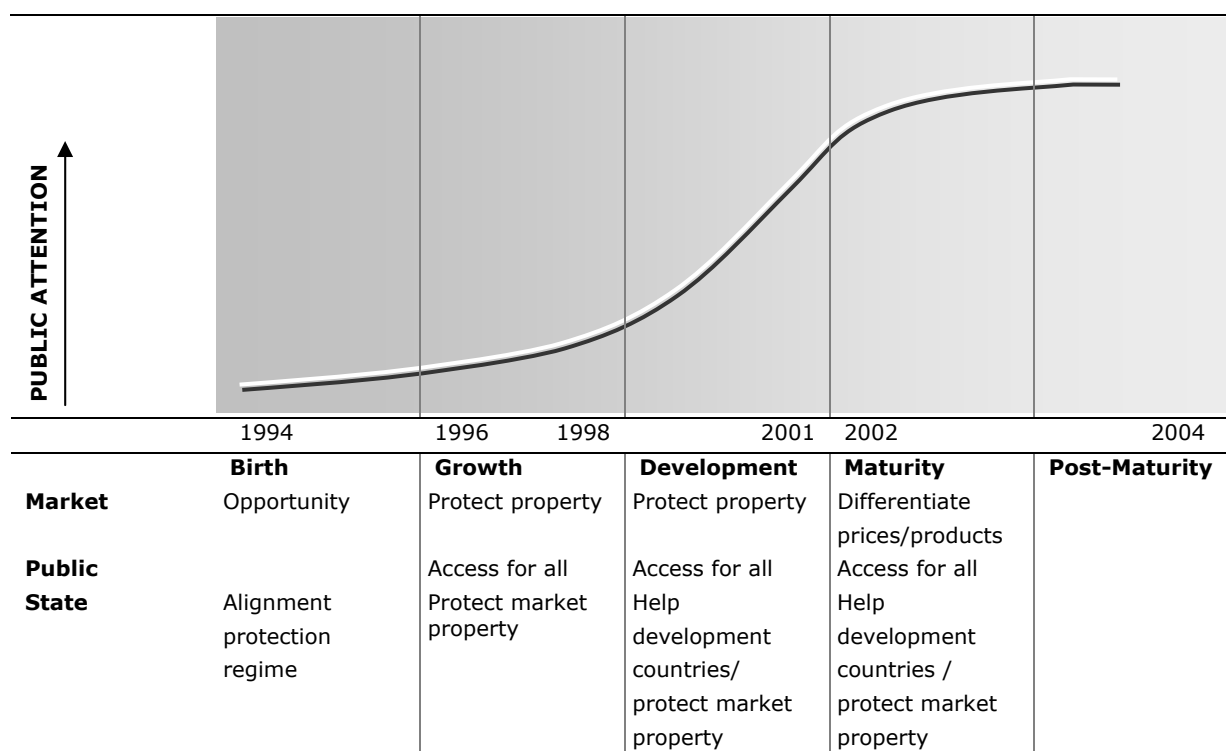
The period of 1998 to 2001 is characterized by growth and development of the issue. This period shows how an ideals gap results in controversy. While multinational pharmaceutical companies argue that they are not the cause of AIDS/HIV and act upon their limited monopoly, NGOs become increasingly active in forming alliances and drawing attention to (the publics view of) the responsibilities of these companies (WHO, MSF, UNAIDS). Multinational pharmaceutical companies ultimately react to the rise of generic manufacturers (South Africa trade dispute).

At the same time, some of governments of developed countries (USA and EU) react to the developments of a pharmaceutical industry in Brazil and Thailand via lawsuits, while other governments of developed countries (for instance France) become active in donation and negotiated special prices programs.

Maturity of an issue

Maturity of the issue is reached in 2002 with the signing of the Doha declaration. Several main pharmaceutical companies communicate their aims for corporate social responsibility with regard to ARV access. A new NGO is founded (Global Fund to Fight AIDS, Tuberculosis and Malaria) and a new ARV access program (3by5) is started, seemingly closing the ideals gap.

FIGURE 2: Issue lifecycle of access to ARVs



Post-maturity

Signs of post-maturity start in 2002 with the failed WTO agreement upon import licenses. Paragraph 6.3 of section 6 will discuss post-maturity in more detail.

2.5 Who's problem?

The focus on the controversies surrounding access to AIDS / HIV treatments relating to the pharmaceutical industry can be summarised as follows:

- There are seven pharmaceutical companies responsible for producing the top 10 HIV Antiviral products: Merck, Pfizer, Bristol-Myer Squibb, Abbott Laboratories, Boehringer Ingelheim, Roche, and GlaxoSmithKline;
- No cure for AIDS/HIV has yet been found;
- Protection of intellectual property rights through licensing means that the cost of ARV treatments is too high for governments of developing countries to afford, limiting their access significantly to those areas where HIV is most prevalent;
- Protection of intellectual property rights can lead to monopoly pricing;
- The pharmaceutical industry is investment intensive meaning that focus is placed on R&D of drugs that will provide good financial returns. The "10/90 gap": only 10% of R&D expenditure is spent on research into 90% of the world's diseases. (Global Forum for Health Research, 2004);
- In addition to the pharmaceutical industry, large multinational companies (MNCs) contribute to the problem by locating in and maintaining the low wage levels of developing countries, which contributes to the poverty situation. HIV is associated with poverty; people are unable to afford the health care they need.

HIV cannot be cured yet. There are currently only preventative approaches to mitigate the spread of the virus, and its effects. In this sense, the role of pharmaceutical companies must be made clear. Antiretroviral therapies provided by the pharmaceutical companies have the ability to prolong life significantly and reduce the physical effects of the infection. However, it is important to recognise that medicine is not a solution, it is only a mitigation to the major problem.

2.6 Conclusion

In recent years, pharmaceutical companies have come under intense criticism from NGOs in providing developing countries (affordable) access to ARV medicines. The issue is characterised as an ideals gap. Providing access to ARVs is not the sole responsibility of the pharmaceutical industry. It is a responsibility of all the stakeholders involved.

3 Diagnosis

3.1 Introduction

This section is split in two parts. The internal diagnosis will assess whether corporate behaviour during the key events have made an impact on the reputation of the pharmaceutical companies. The external diagnosis will assess what the stance is of the other stakeholders on the behaviour of the company and will describe the relatedness of the issue.

3.2 Theory: reputation

Issues resulting in public controversy could impact the reputation of companies (van Tulder and van der Zwart, 2003). Reputation is based on six pillars: emotional attractiveness, products and services, financial performance, vision and leadership, work environment, and social and environmental responsibility. Three pillars relate directly to three primary stakeholders: consumers, investors and employees.

Internal diagnosis

3.3 Financial markets

Measuring reputation in financial markets

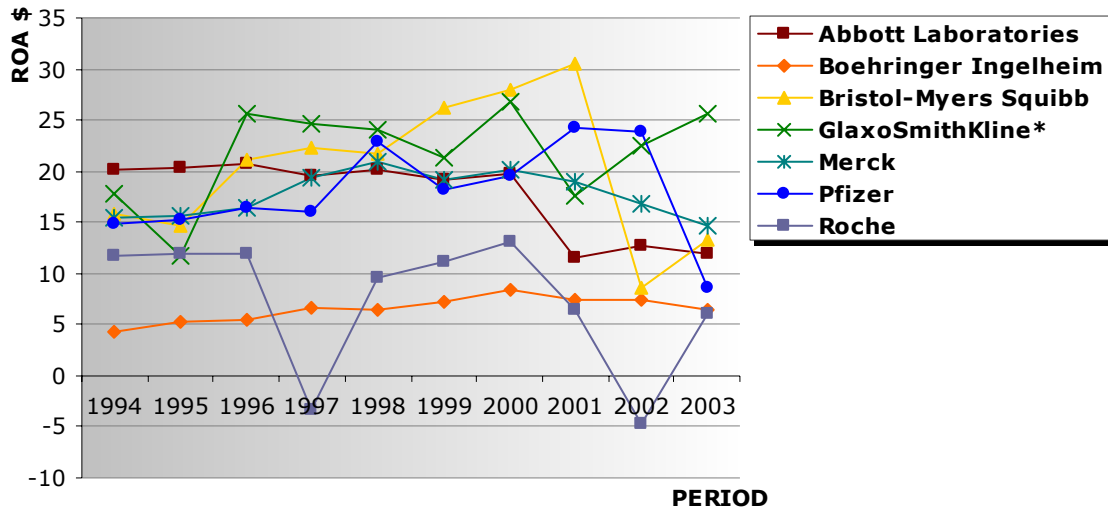
Companies with a high reputation generally have good credit ratings, higher returns and higher price-earning ratios. These companies could also be listed in so-called 'Best in Class' indexes. Companies who sustain reputation damage are less able to raise capital either by new stock issues, or debt and interest payments. Inclusion in a best-in-class index is determined by a company's transparency and openness with regard to corporate social responsibility (van Tulder and van der Zwart, 2003).

Boehringer Ingelheim is privately owned and could, in some cases, not be included in the analysis. Abbott Laboratories, Bristol-Myers Squibb, Merck and Pfizer are listed on the S&P500 (USA). GlaxoSmithKline's company listing is on the FTSE (UK) and the company stock of Roche is listed on the SMI (Switzerland). Abbott Laboratories, Bristol-Myers Squibb, Merck, Pfizer, GlaxoSmithKline and Roche experience more reputation risk than Boehringer Ingelheim because investors can affect these companies more easily than a privately owned company.

Return on Assets

Figure 3 shows the return on assets (ROA). ROA is a common measure of managerial performance. Boehringer Ingelheim and Merck have been relatively stable over time. Abbott, GlaxoSmithKline and Roche see a decline in ROA in 2001 after respectively steady years. For Bristol-Myers Squibb and Pfizer this decline starts in 2002. The ROA in the period 2000-2001 of Abbott, GlaxoSmithKline and Roche show (and Bristol-Myers Squibb) there may be some sustained reputation damage.

FIGURE 3: Return on Assets

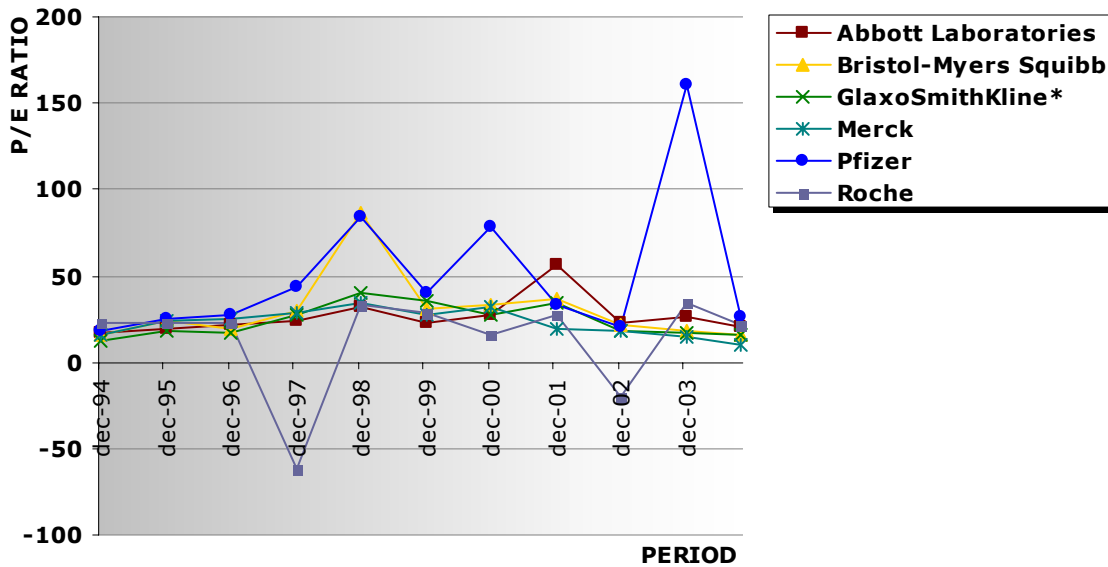


* Return on assets 1994-1999 Glaxo Welcomme
(Source: Thompson, 2004)

Price-Earnings Ratio

Figure 4 shows the price earnings ratio (PE). The price earnings ratio's of Abbott, Bristol-Myers Squibb, GlaxoSmithKline and Merck have been relatively stable over time, performing in a bandwidth average of 8.55. Pfizer has a three high positive fluctuations, Roche has two negative fluctuations, but overall these companies perform relatively within in the same bandwidth range as Abbott, Bristol-Myers Squibb, GlaxoSmithKline and Merck. It shows that the price earnings ratio's make the companies a reputable investment.

FIGURE 4: Price Earning Ratio



*P/E ratio 1994-1999 Glaxo Welcomme
2004 P/E ratio 18/10/2004

(Source: Thompson, 2004)

Credit ratings

Table 3 provides an overview of the credit ratings given by Standard and Poors and Moody's for the period 1997-2003. It shows that credit ratings regarding long-term debt, for five of the seven companies are generally high and fairly stable over time. It does not seem that the companies have a problem raising capital by debt at low interest rates due to sustained reputation damage in the past.

TABLE 3: Credit ratings long-term debt by Standard and Poors and Moody's

		2003	2002	2001	2000	1999	1998	1997
Abbott Laboratories	S&P	AA	AA	AA	AAA	No prior data available		
	Moody's	A1	Aa3	Aa3	Aa1			
Boehringer Ingelheim		No data available						
Bristol-Myers Squibb	S&P	AA-	AA	AAA	AAA	AAA	AAA	AAA
	Moody's	A1	Aa2	Aaa	Aaa	Aaa	Aaa	Aaa
GlaxoSmithKline	S&P	AA	AA	AA	AA	AA*		
	Moody's	Aa2	Aa2	Aa2	Aa2	Aa2*		
Merck	S&P	AAA	AAA	AAA	AAA	AAA	AAA	AAA
	Moody's	Aaa	Aaa	Aaa	Aaa	Aaa	Aaa	Aaa
Pfizer	S&P	AAA	AAA	AAA	AAA	AAA	AAA	AAA
	Moody's	Aaa	Aaa	Aaa	Aaa	Aaa	Aaa	Aaa
Roche		No data available						

* Credit rating for Glaxo Welcomme

Source: Based upon available annual and financial reports acquired via <http://annualreports.info> and company websites

Best in class

The three best known international CSR or sustainability indexes are the Domini 400 Social Index (DSI 400), FTSE4Good and the Dow Jones Sustainability Group Index (DJSGI) (van Tulder and van der Zwart, 2003). Due to the nature of these investment funds, it is hard to find historic portfolio data. Of the seven companies, only Merck (1.841%) is currently found in the DSI400, ranked 9th in the top ten investments (DSI400, 2004). Merck (1.01%), Pfizer (3.26%), GlaxoSmithKline (1.81%) and Roche (1.05%) are currently ranked in the FTSE4 Good Global 100 index (FTSE4GOOD, 2004). Pfizer, GlaxoSmithKline and Roche are also found in the global DJSGI (DJSGI, 2004a). All are ranked in the top 7 of the pharmaceutical sector (DJSGI, 2004b).

Financial Times (FT) and PricewaterhouseCooper (PwC) have undertaken several surveys of chief executive officers (CEOs), fund managers, NGOs and media commentators regarding most respected companies internationally, nationally, per sector, most shareholder value, commitment to CSR and integrity. Out of the seven companies, GlaxoSmithKline and Pfizer are recognized for their commitment to CSR and for creating the most value for their shareholders within the top 50 companies. Pfizer is also recognized as one of the world's most respected companies and for demonstrating the most integrity, both ranked within the top 70. Pfizer, GlaxoSmithKline and Roche have a ranking in the list of world's most respected companies within countries. Table 4 shows the rankings of three of the seven companies with regard to most respected companies within the healthcare sector (PricewaterhouseCoopers, 2003).

Overall Pfizer, GlaxoSmithKline (and Merck and Roche to a lesser extent), are recognized for their CSR efforts.

TABLE 4: World's most respected companies within healthcare sector

	2003	2002	2001	2000	1999	1998
Pfizer	1	2	1	1	1	3
GlaxoSmithKline	2	3	4	3	6	1=
Merck	4=	5	2	2	2	1=

(Source: PricewaterhouseCoopers, 2003)

Reputation effects on stock markets

The following cases show the reputation effects of companies patent strategies on the stock market (see also appendix I for graphs).

Battling Infringement: South African Trade Dispute

The South African Trade dispute is a fine example of how the pharmaceutical companies handle infringement and face the pressure of NGOs (see appendix I).

The announcements on March 5, 6 and 7 of 2001 show heavy drops in stock price averaging per day for the American companies: -1.74% for Abbott, -1.90% for Bristol-Myers Squibb, -2.44% for Merck and -1.26% for Pfizer in a positive market (+0.74% a day). This result is the same for GlaxoSmithKline, -1.15% in a positive market (+0.72%). Roche does not seem to be affected averaging a +0.44% a day in a positive market (+0.32%).

Company stock prices are negatively corrected in two days of reports on abandoning the law suit and seeking a deal. Averages per day: Abbott -1.47%, Bristol-Myers Squibb -2.74%, Merck -1.61%, Pfizer -3.12%, GlaxoSmithKline -3.54% in positive markets S&P +2.57% and FTSE +0.96%. Roche is the only company with a positive average during these two days of +0.91% in a positive market (+0.27%)

The compromise is negatively corrected in the cases of Merck (-2.97%), Pfizer (-1.61%), GlaxoSmithKline (-1.29%) and to a lesser extent Abbott (-0.56%), Bristol-Myers Squibb (-0.63%) and Roche (-0.18%)

Advocating legal protection: WTO negotiations

With regard to the Doha Declaration, investors do not seem to applaud or negatively correct the outcome of the companies' advocacy. The events relating to the import licences debate shows a mixed picture. Cheap drugs boost trade talk on November 16, 2002 leaves Abbott (-0.91%), Pfizer (-0.39%), Roche (-0.47%) and GlaxoSmithKline (-1.89%) going down in relatively calm markets.

United Kingdoms move to end deadlock is not received positive by investors (-2.71%) in a positive market (1.09%). The last push for an agreement, again does not indicate a negative or positive correction on the companies' stock prices.

GlaxoSmithKline: Cutting down the costs

In February 2001, investors publicly supported an ARV price cut. The effect of GlaxoSmithKline's announcement to review drug pricing policy might show a little impatience on behalf of the investors (-0.79%). However, on the day that the price cut finally was announced, stock prices climbed 2.34% in a calm market (+0.34%).

The announcement of extending the low pricing policy of GlaxoSmithKline on June 11, 2001 shows only a small drop in stock price (-0.61%) in a negative market (-1.36%). A year later, June 20, 2002, a two-year price freeze on HIV/AIDS medicines was announced, showing also a small drop in stock price (-0.14%) in a negative market (-1.50%). On September 6, 2002, another price cut, shows a 1.34% rise in a positive market (+2.13). Finally, April 28, 2003 shows a small rise (+0.32%) in a positive market (+1.63). It is clear that these investors do not negatively correct low pricing behaviour.

3.4 Labour market

Labour: the pharmaceutical industry

The pharmaceutical industry is knowledge-based, characterised by its commitment to collection, distribution and implementation of new knowledge, with a view to innovation and the development of what is known. This requires a labour force of knowledge workers: - highly trained individuals with specific qualifications, typically originating from a distinctive academic background. (91% of pharmaceutical industry employees in the US and Europe have a bachelors, masters, doctorate or professorship (Rios, 2004).) For this reason, the industry has developed in and dominates well-developed economic areas, with key player located across the U.S., Europe, and Japan. Recruitment is focused on seeking “knowledge workers”; potential graduate employees, headhunting from competitors, and ex-military pharmacists seeking civilian jobs. The industry as a whole, is experiencing labour shortages. Reputation may contribute to this, but other factors include structural causes; a greater proportion of females working within the sector (26% in 2003 compared to 23.5% in 2002 (Rios, 2003 and 2004)), some of who interrupt their career to raise a family, and also the growth of supermarket pharmacies with extended opening hours. Industry wages are typically higher than average as is expected of a specialist profession, however, in the US, due to the acute labour shortage, newly qualified pharmacists can earn between \$65,000 and \$100,000 (Stacey, 2003). The typical labour profile within the industry in the US and Europe is shown by table 5 below.

TABLE 5: Profile of the typical pharmaceutical industry employee working in the US and Europe

	US	Europe
Gender	Male	Male
Age	42	42
Highest level of education	Bachelor's	Masters
Field of study	Analytical chemistry	Pharmaceuticals/pharmacy
Years of professional work experience	16	18
Type of employer	Private industry	Private industry
Job function	Quality Assurance / Control	Quality Assurance / Control
Years at current employer	6.8	10.6
Hours worked per week	46	45
Holidays taken per year	12	23
Mean base annual salary (2002)	\$82,163	\$59,918
Mean base annual salary (2003)	\$84,477	\$70,131

(Source: Rios 2003 and 2004)

Labour: pharmaceutical industry and corporate social responsibility

A Survey of industry employees taken over the last few years, show the changing views on ethical issues (see table 6). Figures indicate the percentage of respondents (a sample of over 1500 from the US and Europe) who consider ethical issues should be an important concern of new employees. Unfortunately, data prior to 2001 is inaccessible, therefore it is difficult to critically analyse trends in opinion. It is clear however, that in 2002 employees held significantly raised concerns about ethical issues, in a period following intense media coverage of pharmaceutical activities and related CSR issues.

TABLE 6: Percentage of respondents who consider ethical issues should be an important concern of new employees.

Year Ending	2003	2002	2001
US	34	61	44
Europe	32	65	23

(Source: Rios, 2002, 2003 and 2004)

Unarguably, the behaviour of an employer has an effect on the employees, and the greater the extent to which corporate behaviour is exposed to the media, the greater this effect.

BOX 2: Statements labour in pharmaceutical companies

“We could hire almost anybody we wanted for 10 years because of the feeling in the company.” Roy Vagelos, Former CEO of Merck & Co., Inc., arguing that the company’s decision to donate Mectizan (a drug to cure river blindness in Africa), positively impacted employee morale.
(London, 2004)

“You don’t need a PhD in social psychology to see that employees at any company – especially a company whose business is human health – like to see their employer behave well.”
(London, 2004)

Abbott Laboratories chief executive, Miles White, recognises that the mood among his 72,000 employees is a consideration in deciding “how Abbott should spend its citizenship dollars”.
(London, 2004)

“...I need to balance the demands from the Board...with the needs of patients, customers, colleagues, business partners, and governments and communities.... Realistically, to build Pfizer’s value over the long-term, I must negotiate trade-offs among these various stakeholders.
Hank McKinnell, Chairman & CEO, Pfizer Inc, to the Council of Institutional Investors
4 September, 2003

(Source: London, 2004; Pharmaceutical Shareowners Group, 2004)

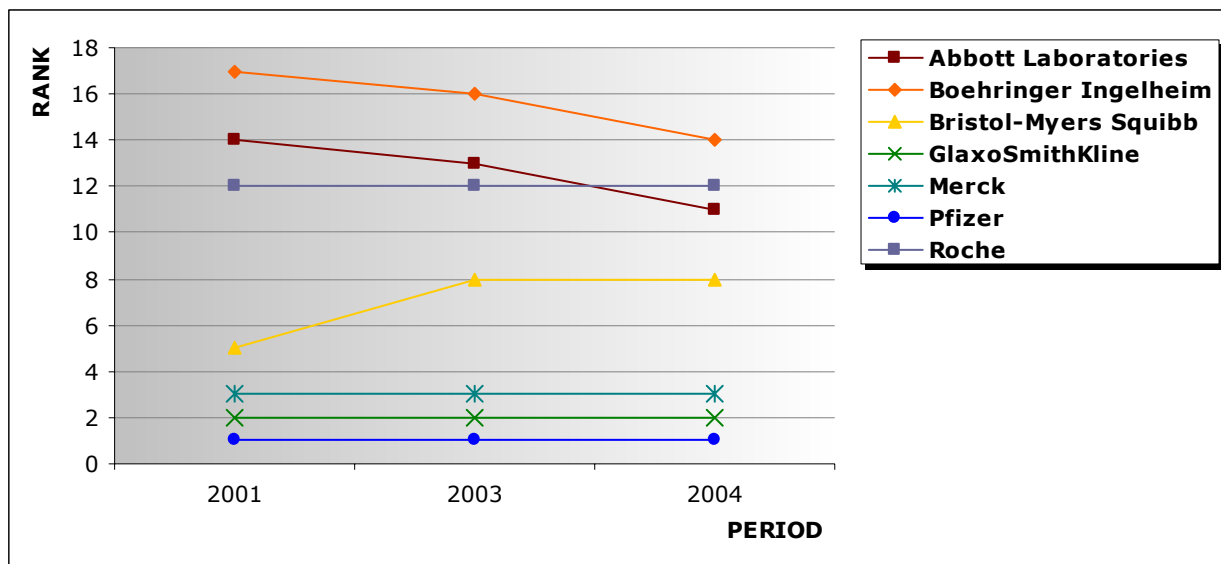
Labour: reputation within the pharmaceutical industry

The relationship between reputation and effect on labour is very difficult to measure conclusively; trends within company rankings are affected by a multitude of factors and hence attributing the affect of reputation on labour (or any other single factor) as a cause of shifts within these ranking is not a reliable approach. Although we appreciate this caveat (and a substantial one at that), by examining rankings both within industry and across all markets, we can gain a limited insight into the possible effects of reputation.

Rankings within the industry give and indication of how pharmaceutical companies are performing in comparison to their competitors. The analysis is based on the ‘Top 50 Pharma’ reports, dated between 2001 and 2003. Only those companies of interest to this research have been included.

It is clear from figure 5 that the pharmaceutical industry is highly competitive, with Pfizer, GlaxoSmithKline and Merck maintaining the top three positions over the last four years, whilst Roche has maintained its ranking as 12th. Abbott and Boehringer Ingelheim have improved their rankings, each by three places. Out of the seven companies of interest, only one, Bristol-Myers Squibb has dropped in ranking, from 5th to 8th over the three-year period. Interestingly there seems to be a significant variance between the highest and lowest rankings of the seven companies. Boehringer Ingelheim, who’s Antiviral product is ranked 8th², was ranked 18th in 2001 indicating that the overall performance constitutes an extensive range of activities. This emphasizes the point that rankings are very subjective and difficult to pinpoint causes of shifts.

FIGURE 5: Ranking of companies within the pharmaceutical industry



(Source: Pharmaceutical Executive, 2002; 2003 and 2004)

² According to the Top 10 HIV Antiviral Products in terms of global sales based on pharmacy markets in the U.S., Canada, Germany, Italy, France, Spain, U.K., Brazil, Mexico, Argentina, Australia, New Zealand, Japan (IMSHealth, 2002)

Rankings of pharmaceutical companies (stating their top three attributes), in terms of best reputation as an employer according to respondents of a survey undertaken for Science’s Office of Publishing and Member Services, show five of the seven companies to be within the top twenty (see table 7). This ranking, which is based specifically on reputation, shows a contrasting difference to the general rankings of ‘Pharm Exec 50’. Of the seven companies, only five appear in the top 20, and their respective positions are different. Pfizer still secures the top position with in the seven companies (but is longer ranked 1st overall).

Respondents of the survey also indicated the 8 “main attributes that drive scientists’ opinions of companies’ reputations”. These were: 1) Being an innovative industry leader; 2) Having loyal employees; 3) Having work and personal values that are aligned; 4) Doing important, quality research; 5) Being a good financial investment; 6) Having a clear vision toward the future; 7) Being socially responsible and 8) Providing job security. (Gwynne, 2004) According to these findings, social responsibility is not considered to be a priority attribute of reputation amongst the labour force.

TABLE 7: Ranking of companies within the Pharmaceutical Industry

Rank	Company	Three Top Attributes		
5	Pfizer	A good financial investor	Clear vision toward future	Innovative industry leader
6	Merck	Does important, quality research	Innovative industry leader	Socially responsible
16	Abbott Laboratories	A good financial investor	Socially responsible	Clear vision toward future
19	GlaxoSmithKline	Does important, quality research	Socially responsible	Innovative industry leader
20	Roche	Does important, quality research	Work and personal values are aligned	A good financial investor

(Source: Gwynne, 2004)

Labour: reputation across all sectors

When considering the effect of reputation on the labour market, a company’s position with respect to others, can be a useful indication. The following table is based on Fortune Magazine’s rankings of the top 100 best companies to work for in the U.S. (Fortune, 1998; 1999; 2002; 2003 and 2004 and Great Places to Work Institute, 2004). Only three of the seven companies were listed between 1998 and 2004. Note that Merck, who has consistently been ranked number 1 on the Fortune 500 list between 1998 and 2003, scores considerably lower in the Fortune rankings of best company. This suggests that the profitability of a firm is not necessarily linked to what makes a good company, in the opinion of the employees. Pfizer only appeared in the rankings in 2000, 2002 and 2003, indicating that their reputation (as a good company to work for) has been altering quite substantially. The company has fluctuated in and out of the top 100 several times over the seven-year period, and given that the lowest entry point has been at number 57, this indicates that there have been significant shifts in opinion. In the period 2001 / 2002, Pfizer’s rankings were much

lower than that of 2000 and 2003. This may be associated with the intense media coverage of CSR of the pharmaceutical industry in this period; trends seen in both Merck and Pfizer's rankings correlate strongly to the trend observed in table 8.

It is difficult to make any assumptions with respect to GlaxoSmithKline, as not enough data is given. Interestingly, Merck and Pfizer are the only two (of the seven) companies that have any significance in these rankings. Based on Gwynne's rankings (see table 7), we would expect Abbott (which is a U.S. firm) to score higher than GlaxoSmithKline in the Fortune rankings.

TABLE 8: Ranking of Best Companies to work for in America

	2004	2003	2002	2001	2000	1999	1998
Merck	70	31	82	39	38	28	9
Pfizer		21	57		20		
GlaxoSmithKline							100

(Source: Fortune, 1998; 1999; 2002; 2003 and 2004 and Great Places to Work Institute, 2004)

Comparative data for the UK is summarised in tables 9 and 10. Great Places to Work Institute, whose findings are published in the Financial Times, have collated the first set of data (see table 9). On this basis, we can consider the source to be relatively reliable. The data in the second table has been collated by Best Companies, whose findings are published in the Sunday Times (United Kingdom). They are also sponsored by the UK's Department of Trade and Industry, which gives the company and its findings, improved credibility.

The data in table 9 is slightly difficult to analyse, as rankings are of the top 50 companies, apart from 2002, which is based on the top 100. Table 10 is based on rankings of the top 100 across the full period. The data is consistent with that of the best companies to work for in America, in that the rankings are low in 2001 / 2002. (66 for Boehringer Ingelheim in 2002, and below 100 for Merck and Pfizer, indicated by absence of ranking.)

It is interesting to observe the differences in data between the two sources, indicating differing criteria of rankings. Boehringer Ingelheim appears to have decreased in ranking in the first instance, and improved its ranking in the second. In addition, Merck does not appear in the top 100 according to Best Companies. Discrepancies between data sources make analysis difficult, however these rankings are collectively a useful indicator of the industry's trends.

TABLE 9: Best Workplaces in the UK

	2004	2003	2002	2001
Boehringer Ingelheim	23	20	66	
Merck	49			
Pfizer				23

(Source: Great Places to Work Institute, 2004)

TABLE 10: Best companies to work for in the UK

	2004	2003	2002	2001
Boehringer Ingelheim	15	33	66	
Pfizer				23

(Source: Best Companies, 2004)

External diagnosis

3.5 Consumer markets

Consumer markets: the pharmaceutical companies

To a large extent, national institutional environments have converged due to the effects of the European Union, Trade Related Aspect of Intellectual Property Rights (TRIPS), and World International Property Organisation (WIPO). Through this process, patent environments have become highly similar, irrespective of a company's country of origin. Patent environment has therefore had little influence on which markets a company pursues, however those markets in the developed world are significantly more profitable and consequently more attractive. An analysis of the seven companies' markets is given in appendix II. Data was sourced directly from the respective companies' annual reports. It must be noted that percentage figures were not available specifically for pharmaceutical sales (although this does form the majority of sales revenue for all seven companies). Varying levels of market breakdown are given, depending on corporate information available. Figures are based on data for the year ending 2003, unless otherwise stated. The origins and market characteristics of each company are briefly summarised below.

The North American market (and the Americas in the case of Boehringer Ingelheim), accounts for the majority sales of all 7 companies, ranging between 37 and 62%. Those three companies with the lowest sales in the United States are European based firms, whilst the remaining four are American. This demonstrates that national origin does have an impact on markets, and indicates that consumers may be favourable towards domestic companies. This would therefore suggest that a domestic company is less susceptible to reputation within its home nation. If this is the case, the additive effect of favoured domestic companies and the United States being the largest market within the Pharmaceutical industry, provides American firms with an advantage over their Europe counterparts, with respect to reputation damage.

Europe is the second largest market (accounting for approximately 30% on average). Table 11 below, summarises the percentage of sales in the United States and Europe for the seven names companies. From this analysis, it is clear to see that Europe and the U.S. are the two most important markets in the industry.

TABLE 11: Percentages of sales in USA and EU

Company	United States	Europe
Bristol-Myers Squibb	56	30
Boehringer-Ingelheim	48	30
Roche	37	32
GlaxoSmithKline	52	28
Abbott Laboratories	61	< 31
Pfizer	60	< 40
Merck	59	< 24

Bristol-Myers Squibb

Origin: United States – Founded in 1887

Approximate number of employees worldwide: 44, 000

Bristol-Myers Squibb distribute their pharmaceutical products principally through wholesalers, but also directly to retailers, hospitals, clinics, government agencies and pharmacies. Pharmaceutical sales account for 71% of total sales, with 56% and 30% of the pharmaceuticals market based in the United States and Europe respectively.

Whilst the proportion of pharmaceutical sales in the U.S. has been declining over the last three years (57% in 2002, and 62% in 2001), those in Europe have been growing (28% in 2002, and 23% in 2001). At 3%, the Japanese pharmaceutical market has remained constant and relatively small over the last three years.

Manufacturing takes place in the United States, Puerto Rico, and 15 other countries.

Boehringer Ingelheim

Origin: German – Founded in 1885

Approximate number of employees worldwide: 34, 000

Data on geographical division of total sales is only available for 2002, showing that 48% of Boehringer-Ingelheim’s market is based in the Americas, and 30% in Europe. Prescription and over-the counter drugs account for 95% of total sales.

Roche

Origin: Switzerland - Founded in 1896

Approximate number of employees worldwide: 65, 000

Roche sells products in over 150 countries, with key markets for prescription sales in the United States (accounting for 37%), Europe (32%) and Japan (16%).

GlaxoSmithKline

Origin: United Kingdom - founded in 1715

Approximate number of employees worldwide: 100, 000

GlaxoSmithKline supplies over 130 countries with its products, distributing prescription medicines primarily through wholesale drug distributors, independent and chain retail pharmacies, physicians, hospitals, clinics, government entities and other institutions.

Within the United States, which accounts for 52% of the companies market (by sales), the growth of managed care organisations and pharmacy benefit managers has been encouraged by market pressure to contain healthcare costs. Using a range of methods to lower costs (including the substitution of generic products or other cheaper therapies for prescribed branded products), these intermediaries have become of increasing importance to GlaxoSmithKline, who contract to this sector through a few wholesalers.

Europe is GlaxoSmithKline's second largest market, accounting for 28% of sales. All other geographic areas (Latin America, Asia Pacific, Canada, Japan and Middle East / Africa) are minority markets, each contributing less than 7% to total sales.

Abbott Laboratories

Origin: United States - Founded in 1888

Approximate number of employees worldwide: 55, 000

Abbott Laboratories' key market is that of the United States with 61% of total sales – the second largest U.S market percentage of the seven companies in question. Products are distributed in 130 countries worldwide. Europe accounts for less than 31% of total sales, where as Japan only accounts for 5%.

Pfizer

Origin: United States – Founded in 1849

Approximate number of employees worldwide: 122, 000

Pfizer's products are available in over 150 countries. The company website provides very little information regarding the geographic breakdown of sales: the United States accounts for 60% of total revenue, and the remaining 40% constitutes all other countries.

R&D sites are based in the United States, United Kingdom, Japan and France, with affiliates of the company located in 38 countries worldwide.

Merck & Co. Inc

Origin: United States – Founded in 1891

Approximate number of employees worldwide: 63, 000

The United States accounts for 59% of the company's total revenues, Europe, the Middle East and Africa for 24%, and Japan accounts for 7%.

Measuring reputation in consumer markets

In a world where consumers have the feeling that the government is no longer looking after them, they are looking after themselves. If the consumers can't trust the government to get their primary needs such as healthy food, clean air and safety they will go to a group who can help them with those needs: the multinationals. Consumers are getting more and more able to force those multinationals to change the way they do business and set focus on the weaknesses of the system. In competitive markets, consumers are mobile. If they don't like the way the company is doing business, they can readily switch to another supplier to meet their needs. In this way, they are very

powerful with their behaviour. The greater the competition within a market, the better the reputation mechanism works. The reputation mechanism however, is dependent on competition, with out it, consumers will have little opportunity to switch supplier, meaning that reputation will have a negligible effect on a company's market (Hertz, 2001).

Reputation damage in the consumer market is most evident in the loss of turnover or market share. The problem however, is that companies will rarely admit that they lost turnover or market share when they are confronted with, for example a boycott. This makes it very difficult for researchers to prove the possible damage of such actions (van Tulder and van der Zwart, 2003).

Boycotts

In July 2004, Abbott Laboratories increased the price of its anti HIV/ AIDS drugs 'Norvir' fivefold in the United States. Estimates made by Wall Street analysts suggest that accompanying this, an increase of 50m dollar in the company's annual turnover will follow. One of Abbott's main defences against the price increase is that additional revenues will be used to shorten the time to market of new drug development. Despite the company's efforts to justify the price increase, the reaction has been intense. Lapel badges, petitions and protests were set up against the company, and the U.S, some doctors even wore "Boycott Abbott" badges on their white coats. (London, 2004)

The exact results of this boycott against Abbott in terms of reputation and financial effects are very hard to measure and currently not available. As mentioned above companies do not give negative information about themselves in cases like this, because it proves that they can be harmed by actions like this.

Company actions

In 2000, three major drug companies cut their prices for ARV drugs in developing countries. Along with those price cuts, large pharmaceutical companies have programs to support the healthcare system in developing countries.

- Boehringer Ingelheim and Pfizer both have large drug donation programs.
- Abbott Laboratories introduced the Step Forward – for the world's children, which focuses entirely on children who have AIDS and children who have lost their family by AIDS.
- Bristol-Myers Squibb is spending 115 million dollars on community programs in Africa to help woman and children with the AIDS virus in southern Africa.
- During the South Africa conference of July 2000 Merck announced its new anti AIDS program called the Botswana Comprehensive HIV/ AIDS partnership. Merck promised to spend 50 million dollars over the next five years on contributions of medicine to Botswana.

(Source: Blum, 2000)

The result of these moves has been to reduce the pressure on the industry. Next to these healthcare support programs, the lower prices have stimulated to move the public debate to the many obstacles of providing treatment in developing countries. These obstacles can be identified as the lack of medical infrastructure, political commitment from developing governments and the shortage of funds to purchase the medicines.

“According to Chris Strutt, GlaxoSmithKline’s vice-president for government affairs in Europe, they will probably never be completely out of the firing line. The positive element is that since Aids conference in Barcelona (2002), the industry has seen a shift in attention towards the lack of funding by government and away from prices and patents.” (Dyer, 2003)

However, public-health officials and AIDS activists around the world are sceptical about the company-sponsored charity programs. While critics are pleased that more attention is being paid to the AIDS crisis in general, they say that the drug companies' philanthropy will likely do more to burnish the reputation of the corporations than to fight the disease. They charge that the companies' goodwill is intended, at least in part, to shield drug makers from pressure to cut the price of their medicines. An action many observers say would be the most effective way to improve access to costly drugs. (Dyer, 2003)

Reputation rating in the industry

Reputation ratings are empirical data in which the reputation of companies is measured with concrete criteria. Most of these lists are compiled by research institutions that do not provide open access to the results (i.e. they are available for purchase only). One reputation ranking used in this report is the ‘Reputation of the 60 most visible companies in the U.S.’ developed by Harris Interactive in cooperation with the Reputation Institute. Since 1999, the Reputation Practice has used the RQsm to measure the reputations in the most visible companies in the U.S. according to the public. Annual rankings are published in The Wall Street Journal. (Harris Interactive, 2004)

The RQsm is an assessment tool that captures perceptions of corporate reputations across industries, among multiple audiences, and is adaptable to countries outside the U.S.

The Reputation Institute Reputation Ratings are a comprehensive measure of corporate reputation that was created specifically to capture perceptions of a company held by consumers, investors, employees, or key influentials. The instrument enables research on the drivers of a company's reputation as well as comparisons of reputation within and across industries, and internationally.

Of the seven pharmaceutical companies researched, four are American (Bristol-Myer Squibb, Pfizer, Abbott and Merck). Only Pfizer and Merck are listed. Both these companies are on the 2001 list, absent on the 2002 list and reappearing almost the same position on the 2003 list, compared to that of 2001. These findings correlate with those given in table 6, showing that ethical issues were of greater concern to employees in 2002. This provides increased support for the effects of reputation within the industry.

TABLE 12: Reputation ratings of the 60 most visible companies in the U.S.

	2003	2002	2001	2000	1999
Pfizer	28 (71,34)	-	26 (73)	-	-
Merck	32 (68,76)	-	29 (71,8)	-	-

(Source: Harris Interactive, 2004)

The numbers in table 12 indicate the ranking position of the company, and those in brackets represent the RQsm. To give an indication of scale, in 2003 the highest RQsm was Johnson & Johnson with 79,47 and the lowest was Enron with 26,66.

According to RQsm reputation ratings of US companies, Merck and Pfizer are the best-known pharmaceutical companies. The other two US companies of interest, Abbott and Bristol-Myers Squibb, do not feature in these rankings indicating that the public do not view these companies as being amongst the top 60 most visible. (Initial selection is based on nomination by the general public). This is surprising, given that Abbott in particular, has received significant media attention in comparison to Merck over the last few years. It would therefore be expected that Abbott would also appear in these ranking.

3.6 Stance of other stakeholders

Market

Generic Manufacturers

Generic manufacturers can be classified into two types, public and private. Their objective is to supply ARVs at lower prices than multinational pharmaceutical manufacturers. Where public manufacturers focus on their domestic market, private manufacturers focus on the world market. Private manufacturers have a significant share of the world market, whereas public manufacturers have little influence international sales. Their participation in the debates around access to drugs (to help out home markets), prices of ARVs (maintaining that low prices and R&D can exist together) and compulsory licenses have made them well known (Dumoulin, et al., 2003).

State

Home countries of generic manufacturers

The objective of the home countries of generic manufacturers is to improve their production capacities. “These countries favour the development of compulsory licensing in a broad range of cases and not only for AIDS, because they offer a means of developing [their pharmaceutical] sector in order to satisfy local demand or to export.” (Dumoulin, et al., 2003)

Other developing countries

The objective of the other developing countries is to acquire the lowest priced ARVs to help out their population in need (Dumoulin, et al., 2003).

Home countries of multinational pharmaceutical corporations and other developed countries

The objective of home countries of the multinational pharmaceutical corporations and other developed countries is to assist developing countries while maintaining economic and/or political influence (Dumoulin, et al., 2003).

Intergovernmental organizations

A number of intergovernmental organizations play a specific role in the debate around access to ARVs. The World Health Organisation focuses on the therapeutic treatment and access to pharmaceuticals. UNAIDS focus' shifted during the last decade from therapeutic treatment to 'access' (1998) and 'prevention' (2001). The WTO's main goal is to develop trade. (Dumoulin et al. 2003).

Civil society

Non Governmental Organisations: Medecins sans Frontieres and Oxfam

The NGOs Medecins Sans Frontieres (MSF) and Oxfam have also a major role in the debate concerning ARV access. MSF focuses on access: patent protection, drug prices and local manufacturing capacity while Oxfam advocates ARV donations.(t Hoen, 2003, Dumoulin et al. 2003).

UNICEF (a non governmental and intergovernmental 'hybrid' organization) plays a role in investment programs and negotiations regarding mother-to-child prevention (Dumoulin et al. 2003).

Pharmaceutical Shareowners Group

The Pharmaceutical Shareowners Group has expressed deep concern with regards to the ongoing public criticism and consequent negative impacts that this will have on the industry. Although drug pricing and misconduct in clinical trials and marketing areas within the industry have been the focus of such criticism, the response of the Pharmaceutical sector to the HIV / AIDS crisis over recent years is one of PSG's key concerns, fearing that it will have a long-term effect on shareholder value. (Stancich, 2004) The PSG have expressed concern regarding CRS issues and reputation, with respect to their effect on staff moral and recruitment prospects, if companies fail to be proactive in addressing these issues. Knowledge workers, on which the industry is based, are particularly "sensitive to criticisms from friends and family about working for 'unethical' or 'uncaring' companies" (Pharmaceutical Shareowners Group, 2004).

The Pharmaceutical industry views its approach to drug development as a sales problem, which is evident in the "10/90 gap"³ of R&D expenditure. The source of the industry's labour force means that there is little direct impact of the HIV/AIDS epidemic on their workers. This relationship is in contrast to labour intensive work such as that of the textiles industry, where there is a strong chain of responsibility regarding ethics and labour conditions, as their employees are at the heart of the issue. With a growth in significant talent pools from up and coming educational systems such as China and India (where AIDS is more prevalent), these issues may have greater prominence in the near future. (Pharmaceutical Shareowners Group, 2004:9)

³ Only 10% of R&D expenditure is spend on research into 90% of the world's diseases. (Global Forum for Health Research, 2004)

Associate of British Insurers

The Associate of British Insurers' (ABI) report on 'Risks, Returns and Responsibility' (2004) provides evidence for the correlation between business performance and "responsible" employment policies, maintaining that companies who demonstrate greater responsibility will benefit in terms of attracting the best recruits, and increasing the level of retention and motivation of workforce. It is noted that although the impact of corporate social responsibility on employee behaviour does appear to be growing, it is "not uniform across the economy or through time" (Associate of British Insurers, 2004)

3.7 A broader picture: relatedness

Development and health (defined as positive physical, mental and social wellbeing according to the WHO (Leisinger, 1989) can be considered to be interdependent. The social, economic and political environment of a country has a significant influence on the spread of the disease, and more specifically, the HIV virus. Those who face poverty, oppression, discrimination (be it sexual or racial), and lack education, are particularly vulnerable. In developing countries, health is a key to social and economic progress. (Leisinger, 1989: 7-8).

Inadequate access to basic necessities is positively correlated to presence of disease. Poverty was already recognised as a major cause of disease more than 50 years ago (Leisinger, 1989). Using the Thirty-Three Management Challenges for the 21st Century (van Tulder, 2003), tropical disease can be linked to many of the global challenges we face in today's society. This section is not an exhaustive list of the links, nor is intended to explain them, but merely serves to present the main links in a contextual form.

Disease (HIV) thrives in areas where (Leisinger, 1989: 7-8).

- quality of nutrition is low;
- communities lack education and training;
- access to clean drinking water is limited / non-existent;
- access to public services limited / non-existent;
- unemployment levels are high;
- poverty is rife.

Preventative approaches that can be used to limit the spread include the provision of condoms, better education, better access to safe health infrastructures, and abstinence for sexual activity. It is undoubted that an increase in education and health expenditure would improve the situation, however one of the primary obstacles considered, is culture. In Sub Saharan Africa, societies are patriarchal; women have little control over their sexuality. High incidences of rape, polygamy, cultural pressure on woman to bear high numbers of children at a young age, and their recessive power in relation to men, render it difficult for woman to insist on the use of condoms. These problems are exacerbated by war, poverty, and sexual inequality. (The Guardian, 2001).

The problem is a vicious circle in that disease frequently leads to lower labour productivity, which worsens the unemployment problem, and is often associated with areas that are involved in forced labour, child labour and lack of labour rights.

AIDS is also associated with gender inequality; woman with the HIV virus often experience greater stigma and discrimination (UNAIDS/WHO 2004: 10). In Sub Saharan Africa, 60% of those with HIV are woman. A study undertaken in Puerto Rico found that due to woman lacking knowledge about HIV, their greater family responsibilities, lower incomes and feared of disclosure, they were less able to access AVR therapies compared to males. In Zambia, this study is reflected in the town of Petauke, where 3 out of 40 receiving ARV treatment are female. (Nunn, Baggaley, and Thomas, 2004)

3.8 Conclusion

The way a company acts in its social environment is very important for the consumer market. If consumers don't like the way the company is doing business, they can readily switch to another supplier to meet their needs.

Consumer dissatisfaction with respect to business conduct can be expressed in several ways. A boycott for instance can have enormous influence on the reputation of the company. Recent boycotts against Abbott have had enormous influence on the reputation of the company. It shows how is very important for a company to avoid negative confrontations with consumers.

All large pharmaceutical companies have enacted in some sort of health program to help developing countries in fighting their diseases. The results of these programs have been to reduce the pressure on the industry. Critics claim the companies' goodwill is intended partially, to shield drug makers from pressure to cut the price of their medicines. According to RQsm reputation ratings of US companies, Merck and Pfizer are best.

It does not seem that the companies have a problem raising capital by debt at low interest rates due to sustained reputation damage in the past. Price earnings ratio's show that the companies are a reputable investment. The ROA in the period 2000-2001 of Abbott, GlaxoSmithKline and Roche shows (and less significantly Bristol-Myers Squibb) that there may be some sustained reputation damage. With regard to best-in-class, Pfizer and GlaxoSmithKline (and Merck and Roche, to a lesser extent) are mostly recognized for their CSR efforts.

Company action against infringement shows a significant negative effect on the company's stock price. Price cuts of ARVs do not show a negative effect and are, generally, positively received. Companies' advocacy for patent protection shows a mixed picture.

Of the three markets considered, (labour, consumer and capital) it is perhaps the labour market that is least sensitive to corporate reputation in the pharmaceutical industry for a number of reasons. Firstly, the nature of the work force is such that they are largely dissociated from the AIDS/HIV problem (i.e. little direct impact is experienced). Knowledge workers are typically motivated by opportunities of development, recognition of efforts and monetary reward. Unless corporate social responsibility and reputation have an explicit impact on these key driving-forces, the reputation

impact on the labour market will be minimal. Paradoxically, knowledge workers are sensitive to peer criticism about working for an ‘unethical’ company, and in view of this, it would be expected that the labour market would be impacted by reputation pertaining to CSR. Job security is obviously considered important, given that the average number of years in employment is 6.8 and 10.6 for the US and Europe respectively (Rios, 2004). This suggests that leaving the industry (be it for reputation reasons or otherwise) is not commonplace.

4 Design/outcome

4.1 Introduction

This section examines the current codes of conduct and corporate responsibility reporting structures within the pharmaceutical industry (specifically those seven companies of interest), how these can be used to achieve solutions, and identifies other self-regulatory options.

4.2 Theory: Codes of Conduct

It was only in the 1950's that Bowen and Carroll first recognised corporate social responsibility (CSR) as a business issue. (Van Rijsbergen, 2004). Progress however, has been slow. It was not until some 20 years later, in the 1970's, that first attempts were made to regulate the behaviour of multinationals through implementation of codes of conduct. (van Kolk and van Tulder, 2004:3)

“International responsibility codes encompass guidelines, recommendations or rules issued by entities within society (adopting body or actor) with the intent to affect the behaviour of (international) business entities (target) within society in order to enhance corporate responsibility.” (van Kolk and van Tulder, 2004)

Not surprisingly, all seven companies of interest have codes of conduct (located on corporate websites). The analysis scheme of van Kolk and van Tulder (2004) is used to measure the quality and comprehensiveness of these codes. It appeared that they differed greatly in completeness and quality (see appendix III). However, these codes of conduct are not specific to a particular issues and therefore are somewhat general in nature. A number of companies have separate documents relating to specific issues or groups of issues, each will be considered in turn.

4.3 Buffering or Bridging strategy?

Following action on a company by a NGO or other organisation of influence with respect to an issue of corporate social responsibility, a decision on how to respond must be made. Firstly, a company will need to check whether the attack is legitimate, and assess the relative power of the attacking group. In cases where the attack is both legitimate and undertaken by a powerful group, the company has to take this attack seriously, and respond accordingly. The managerial responsiveness can take two forms: bridging or buffering (van Tulder and van der Zwart, 2003).

In applying a buffering strategy, the company does not communicate with NGO's or stakeholders, and will show no intent to reveal its strategy or to act responsible for what they are doing / have done. This is effectively shielding or buffering the company from the outside world, and is also known as 'corporate silence'. In applying a bridging strategy, the company actively communicates with its stakeholders and involved NGO's. They openly provide inside information on issues concerning their own company, e.g. environmental and labour issues. One reason for pursuing a bridging strategy is to maintain and safeguard the company's societal 'license to operate' (van Tulder and van der Zwart, 2003).

Leading pharmaceutical companies (including the seven named) tend to engage in bridging strategies, as this reduces the opportunity for further attack, by explicitly explaining their actions and engaging in stakeholder dialogue to correct ‘irresponsible’ behaviour. Corporate codes of conduct are a means of making clear, corporate guidelines, intentions and values to shareholders and wider society.

4.4 Analysis of company codes of conduct

Abbott Laboratories: ‘Code of Business Conduct – Safeguarding Trust’

Although international in scope the code is strongly focused on Abbott’s employees, and on compliance with standards, policies, and procedures. There is little attention on external social issues and the environment.

Boehringer Ingelheim

Boehringer Ingelheim has no code of conduct or similar general document available on its corporate website. However, it does have two specific documents, the first of which is guidelines relating to safety, quality and environmental protection, and the second, a report titled ‘Our planet - our responsibility Environment Safety Health 2000’. Only one reference was made to HIV/AIDS, and that pertained to the Accelerated Access Initiative, in which the company is involved. The guidelines relating to safety, quality and environmental protection were analyzed in place of a code of conduct (see appendix III). In comparison to the other companies of interest, Boehringer Ingelheim’s ‘codes’ were the least comprehensive.

Bristol-Myers Squibb: ‘Standards of Business Conduct and Ethics’

The company’s code of conduct is aimed at the actions of employees and their conduct within the workplace, and has little reference to external societal issues.

GlaxoSmithKline: ‘Corporate Policy’

GlaxoSmithKline’s code of conduct is broad in scope, and is addressed to employees on an international level. No reference is made to social or environmental responsibility.

Merck: ‘Values and Standards’

Merck’s code of conduct is very general, and no information is provided regarding the quantitative nature of issues, or how to monitor them. Although the code is intended as a point of reference for customers, employees, shareholders, suppliers and communities, the content is very much focused on employees. Environmental issues and standards are addressed in a separate manual, and therefore only briefly covered in the code of conduct.

Pfizer: 'Summary of Pfizer Policies on Business Conduct'

Pfizer has a relatively general code of conduct focused on employees rather than on all stakeholders. The compliance structure is very explicit, and clearly explains the reporting method. Social (not relating to employees) and environmental issues are barely touched on, although has a number of separate (policies available on their website) relating to specific issues. This includes 'Pfizer Inc. Environment Health and Safety Policy' and 'A Prescription for Access' (which relates access to medicines in developing countries). The latter of these documents addresses not only HIV/AIDS, but also a number of other infectious diseases, and emphasises the company's long-term commitment to improving the global health situation.

Roche: 'Roche Corporate Principles'

Roche's Corporate Principles are very broad and tend more towards value statements than a concrete code of conduct. The principles are presented in eight different languages, emphasizing the global vision of the firm. The company's commitment to responsibility and maintenance of high ethical and social standards is mentioned, but the specifics of these are not addressed.

General

The analysis confirms the findings of van Kolk and van Tulder (2004) that "with regard to the types of codes adopted, particularly concerning the implementation and compliance mechanisms included, European multinationals tend to adhere to clearer and more specific monitoring systems than US multinationals"

4.5 Analysis of company reporting and compliance

Abbott Laboratories

The company has a 'Global Citizen Report' that examines these issues, and details compliance, the reporting structure, and specifically, access to medicine. Of the seven companies, Abbott was the least open in terms of revealing their efforts towards the AIDS / HIV epidemic. They have however, committed to invest 100 million U.S. dollars over a five year period, in AIDS-related humanitarian programs.

Boehringer Ingelheim

The corporate website provided minimal information on access to drugs initiatives or any form of social reporting.

Bristol-Myers Squibb

Compared to the codes of conduct, Bristol-Myers Squibb's reports are very comprehensive. The company has been separately reporting on sustainability and environmental health and safety for a number of years. In addition, a report titled 'Creating a Legacy of hope – Corporate Social

Responsibility at Bristol-Myers Squibb' was released in 2004, detailing the company's global HIV / AIDS initiative.

GlaxoSmithKline

GlaxoSmithKline has several separate reports available. This includes reporting on sustainability in environmental health and safety, global community partnerships, improving healthcare in the developing world, and commitment to society and the environment. The breadth of information available is indicative of GlaxoSmithKline's long-term commitment to addressing these issues. AIDS and HIV initiatives are given much attention, with 'access to medicines' being one of the company's ten Corporate Responsibility Principles, which were adopted in 2003.

Merck

No supplementary reports are available with regard to social or sustainability reporting. Relating to the specific issue of access to (ARV) drugs, there is however a limited amount of information contained within the 2003 Annual Report, detailing its African Comprehensive HIV/ AIDS Partnership (ACHAP), a partnership with the government of Botswana and the Bill and Melinda Gates Foundation.

Pfizer

Pfizer also has a few reports on corporate social responsibility in particular countries: Hungary, the Philippines, and the United Kingdom.

Pfizer is the only pharmaceutical company to sign the United Nations Global Compact, which constitutes a number of UN agencies, NGO's, corporations, and institutions that conform to agreed principles of good corporate citizenship.

Roche

Separate reports on 'Safety and Environmental Protection at Roche' and 'Sustainability' are available on their corporate website. The guidelines used for reporting sustainability are based on those of the Global Reporting Initiative. Amongst other issues, the sustainability report details Roche's 'BlueSky' initiative, developed in 1998 as a special social program to help fight AIDS. The program undertakes a number of measures including supporting local education and drug donations to infected children or those who have lost parents to the disease. Since 2003, the company has had a Corporate Sustainability Committee, whose purpose is to analyse and co-ordinate sustainable development activities.

4.6 Solutions

Access to medicines can be increased through a number of approaches. Individual companies have varying stances on these options and are therefore involved in combination of approaches, working towards improving access in various ways. Product donations, granting of patent immunity, partnerships, differential pricing and voluntary licensing are the main options available to

pharmaceutical companies. Influential factors including disease dynamics and geographical exposure will impact a company's options (Pharmaceutical Shareowners Group, 2004). Given that differences exist, it is difficult to establish whether there is in fact a single best practice.

All seven pharmaceutical companies engage in a multitude of these approaches to increase access to their products in markets where HIV / AIDS drugs are unaffordable. Reasons for choosing particular approaches are frequently not specified, and involvement levels vary between companies. Specific initiatives, although not an exhaustive list, are outlined in appendix IV.

Product donations

Product donations are appropriate in certain circumstances, but are less sustainable over the long term in comparison to other approaches of improving access, and are therefore not favoured by many companies.

Patent infringement immunity

This is the process whereby a country is granted immunity (an entitlement to non-compliance) by a company, against violation of certain patent rights. Many companies will look at a case-by-case basis when deciding on patent immunity allowances.

Partnerships

By building partnerships with organizations such as that of UNAIDS and UNICEF, pharmaceutical companies are able to involve themselves in helping towards improving healthcare infrastructures, education and provision of care. The disadvantage of these set ups is often, they are narrow in focus, and loose direction over time, through decreasing financial investment. According to WEMOS few global private partnerships last longer than five years, resulting from a lack of financial commitment by the private partner. (Van Rijsbergen, 2004)

One such partnership initiative in pursuit of increasing access to drugs has been the Accelerating Access Initiative (AAI). This constitutes a partnership between UNAIDS, the World Health Organization (WHO), UNICEF, the UN Population Fund, The World Bank, and seven pharmaceutical companies including Abbott Laboratories, Boehringer Ingelheim, Bristol-Myers Squibb, GlaxoSmithKline, Merck & Co., Inc. and Roche.

The partnership was established in May 2000, and is aimed at "working with governments, international organizations, and other stakeholders to find ways to broaden access while ensuring rational, affordable, safe and effective use of drugs for HIV/AIDS-related illnesses." (Pharmaceutical Shareowners Group, 2004). Through this initiative, these companies have offered to provide more affordable medicines in developing countries, to improve the access situation.

Differential Pricing

This involves offering drugs at varying prices within different markets. As mentioned above, companies are particularly concerned about parallel and grey markets, which differential pricing strategies often stimulate. The Pharmaceutical Shareowners Group (2004) maintains that these

industry concerns are generally subsiding, and that many companies are opting for differential pricing strategy as a more sustainable option. This shift has also resulted from pressure on the industry following the South African Trade Dispute (see section 2). Exposing the levels of differential pricing and the rationale behind these varies across the pharmaceutical industry. While some companies consider this as confidential strategic information, others view it as a means to create acceptance and reduce the risk of grey market trading.

Voluntary licensing

Voluntary and non-exclusive patent licenses work in a similar way to compulsory licenses, but are granted by pharmaceutical companies rather than governments.⁴ They effectively allow generic producers to manufacture patented drugs. Pharmaceutical companies will specifically consider the risk of arbitrage (through parallel imports and grey markets).

4.7 Conclusion

Many different options are available across the pharmaceutical industry to increase access to medicines. Abbott Laboratories, Boehringer Ingelheim, Bristol-Myers Squibb, GlaxoSmithKline, Merck, Pfizer and Roche have all engaged in a portfolio of these options at varying levels. It is almost impossible to establish best combination or best practice, due to the complexity of the problem, varying levels of exposure, and lack of measurable results relating to corporate activity in this area. Appendix IV summarises some of the activities of the seven companies, but is by no means an exhaustive list.

Codes of conduct are useful in guiding the ethical behaviour of managers, employees and to some extent, shareholders. However, they are often very general and are not intended to address specific societal, environmental and sustainability issues.

All seven companies have separate reports relating more explicitly to these areas, detailing their activities and efforts towards improving access to ARV medicines.

Codes of conduct and other such policies as mentioned provide an invaluable framework, but to be effective must be implemented appropriately.

⁴ The TRIPS agreement (which came into effect in 1995) states that "In case of a national emergency or other circumstance of extreme urgency" compulsory licences can be granted by the governments of countries, allowing them to by-pass the patent law. The Doha declaration gives the freedom of WTO members to grant these licences, and determine the grounds upon which they are granted. Since August 2003, the WTO council on intellectual property rights has allowed developing countries to manufacture cheaper generic drugs under compulsory licensing, or 'import cheaper generics made under compulsory licensing if they are unable to manufacture the medicines themselves' (Van Rijsbergen, 2004, 2004: 26)

5 Implementation

5.1 Introduction

This section discusses how the three solutions described in section 4 can be implemented.

5.2 Organise implementation of solutions

Historically, companies have tended to be reactive in response to global social and environmental issues, often stimulated into action by high-profile media campaigns, activist lobbying and other external demands.

The global public health issue is primarily the responsibility of governments. Governments however, have an important relationship with pharmaceutical companies in meeting these responsibilities. Their relationship can be said to be symbiotic. Governments depend on pharmaceutical companies for the provision of healthcare solutions, and in turn, pharmaceutical companies depend on governments for the development of adequate health care infrastructures, providing a market for their products. In the distribution of ARV therapies, this aspect of the government-pharmaceutical company relationship is particularly important.

“A successful pharmaceutical industry is a prime example of what is needed in a successful knowledge economy. The UK’s pharmaceutical industry has an outstanding tradition and has contributed very substantially to our economy and to the welfare of our citizens (...) A key feature in maintaining the UK’s attractiveness will be effective partnership at the highest levels between Government and industry.”

Tony Blair, Prime Minister of the United Kingdom. (Corporate Watch, 2001)

Disputes such as that of the South African Trade Dispute, have arisen as a result of lack of systematic regulations concerning the issue of patent infringement in countries experiencing matters of national emergency. This has been viewed as a CSR issue – through patent policy, pharmaceutical companies are restricting access of ARV drugs to those most in need. In absence of regulation relating to corporate social responsibility, the symbiotic relationship can easily become off-balanced in a battle of powers. This report has shown how the pharmaceutical industry has faced market disruptions generated from the sphere of the state (TRIPS versus Doha Declaration) and anti-business campaigns, intelligent markets and market intelligence generally generated from the sphere of civil society (such as Oxfam, Medecin sans Frontieres, UNAIDS, WHO and the Pharmaceutical Shareowners Group).

However, providing access to ARVs is not the sole responsibility of the pharmaceutical industry. It is a responsibility of all the stakeholders involved. The stakeholders need to focus on all the access problems associated with ARVs (including the prices of the medicines) in order to reach the people in need of ARV therapy and to keep up with the increasing number of people with HIV/AIDS.

5.3 Game theory: reputation risk

Prisoners dilemma

Discussions concerning ARV access have primarily been two-dimensional, between two spheres, either market versus civil society or civil society versus state. These discussions have set the stage for a game between two virtual players: profitability and corporate social responsibility (see table 13).

TABLE 13: Prisoners dilemma between profitability and corporate social responsibility

		Profitability	
		High	Low
Corporate Social responsibility	High	COMPETITIVE MARKET BEHAVIOUR CSR as competitive advantage in a market with branded and generic drugs, where the best product and/or company may win	REGULATED MARKET BEHAVIOUR High level of CSR but governmental regulation to provide cheap ARV drugs in all markets. Unable to efficiently recuperate cost of drug development through differential pricing
	Low	MONOPOLISTIC MARKET BEHAVIOUR Civil society and developing countries are unable to counteract this, despite the bad reputation of the firm(s) / industry / developed countries	DESTRUCTIVE BEHAVIOUR Low level of CSR and successful actions by civil society lead to higher reputation risk and reputation damage: fall in share prices, lower staff moral (decrease in productivity) and potential litigation against firms, resulting in loss of legitimacy

Opportunism

Business engagement and public-private partnerships could solve the current prisoners dilemma between profitability and corporate social responsibility by raising pharmaceutical companies from a low level of CSR to a higher level of CSR. However, a new reputation risk could dominate in the form of opportunism (see table 14). In those partnerships one could act more in favour of its own interests (deception), or one may not comply with the made agreements (defection). The key to managing global corporate social responsibility is the readiness to think strategically (Wartick and Wood, 2001). Attention needs to be placed on the outcomes of a company’s decisions and actions, thinking about not only the effect on stockholder value, but also the effects on all stakeholders; concerning social, economic, political, technological and ecological influence.

TABLE 14: Opportunism

	Opportunism
Reciprocity	Deception
Effectiveness	Defection

(Source: Kaptein and Wempe, 2002)

5.4 Organise implementation

Given the linkage between two-dimensional discussions, and prisoner’s dilemma and opportunism, and the ambiguity surrounding codes of conduct and social performance reporting, a partnership between pharmaceutical companies, governments and NGOs is an appropriate implementation

strategy for the ARV access issue. A partnership involving the three societal spheres results in a three-dimensional discussion allowing cooperative game theory. Cooperative game theory has proven to be a successful method in creating distribution codes for a situation with multiple players and shared benefits and shared costs. It focuses on pay-offs and binding agreements instead of strategies, rules, actions, information and non-binding agreements (Hendrickse, 2003).

5.5 Levels of management

Pharmaceutical Companies

With regard to the pharmaceutical companies, social corporate activity needs to be integrated into top-level management and corporate strategy if it is to be taken seriously. Logically, considerations (policies) taken into account at a higher level will be of higher importance, ensuring that they are put into practice. The seriousness and scale of the AIDS issues is such that a committee with specific responsibility is needed to guide progress and adaptation of corporate strategy within each pharmaceutical firm. Van Rijsbergen (2004) notes that sometimes, it is only the subsidiary parts of the corporation who develop an HIV/AIDS policy, resulting from an unequal spread of HIV/AIDS. The seven pharmaceutical corporations of interest to this research paper are all extensively large, multinational companies, and it is clear to see why HIV/AIDS programs may become localised to specific subsidiaries. Although HIV/AIDS programs may be given a high level attention in subsidiaries due to their relevant and specific pool of knowledge, by elevating the issue to management level, its importance will be emphasised within a strategic context, increasing awareness of stakeholders and action through the company using a top-down approach.

Process: dialogue

Setting up a partnership requires a clear and transparent (stakeholder) dialogue (van Tulder and van der Zwart, 2003). Dialogue plays an important role in securing support and creating shared values. It allows the participants of the partnership to set up a partnership code which makes context, conduct and consequences clear (Kaptein and Wempe, 2002).

Discussion about the code and how compliance will be secured, and developing standards and indicators enables the three-party-partnership to inform stakeholders (the countries, institutions or people in need for ART) of their intentions with regard to behaviour, and positively influence their expectations.

Dialogue also enables the managers of the three-parties to integrate the code of conduct throughout the hierarchy of their institutions. In this way the code will be institutionalized: structures and systems will encourage employees in three institutions to follow it, and provide a framework for effective monitoring.

Progress: putting the code into action

AIDS / HIV is not by any means a short-term temporary problem. With an eight to ten year development phase of the virus, it is evident that we will be dealing with the issue, and its consequences, for many years to come.

Partnership code

The greater the time frame over which an issue is addressed, the more integrated into the workforce the code becomes. Focus should be on making codes implicit and part of every day working practice. In addition, the code of conduct needs to be translated into individual meaning for each employee, allowing it to be applied to concrete situations. Gaps between current behaviour and target behaviour need to be identified and ways to close these gaps established. Individual goals should feed up through the organisations, enabling feedback on management's top-down approach.

Performing

Performing constitutes internalisation: Translation of the code's words and meanings into actual behaviour, fully internalising it on an individual level.

The nature of the social responsibility is changing with focus on the various issues and aspects of issues constantly shifting. The three-party-partnerships could hold and develop a portfolio of options in e.g. licensing, pricing, donations, assistance and education programs, and will better equip the partners with tools of social responsiveness to deal with the fast changes in issues.

Reporting

The pharmaceutical industry is one of the most heavily regulated, meaning that additional reporting requirements would not be particularly welcomed although given the lack of structure and substantial differences in current reporting methods, it would provide a much needed framework, ultimately being of long-term benefit.

A clear, coherent and comparable reporting structure should be used, also by the three-party-partnership. Current reporting of access to ARV drugs is mainly confined to qualitative descriptions, and is subordinate to disclosure of other corporate responsibility issues across the industry (Pharmaceutical Shareowners Group, 2004). To allow for comparison of performance from year to year, consistency and assurance in the reporting structure is needed. Through use of guidelines such as the Global Reporting Initiative this can be achieved.

5.6 Critical observers

Implementation through partnership is a joint effort of all the partners. Self-regulation is in this case a powerful tool to deal with the problems of opportunism and prisoners dilemma. A group with the current main stakeholders representatives from all societal spheres can critically observe process (dialogue), progress (strategy) and results (compliance) of the partnership. It can be seen as a self-regulating institution, a combination of a discussion and dialogue, strategic stakeholder and supervisory NGO (DONGO, STRONGO, and SUNGO (van Tulder and van der Zwart, 2004)).

5.7 Conclusion

A partnership between pharmaceutical companies, governments and NGOs is an appropriate implementation strategy for the ARV access issue. A partnership involving the three societal spheres results in a three-dimensional discussion allowing cooperative game theory. It overcomes the current problems related to the prisoner's dilemma and opportunism. It can set standards for code, context and conduct.

6 Evaluation

6.1 Introduction

This section discusses evaluation procedures and it takes one final look at the issue life cycle.

6.2 Monitoring procedures

BOX 3: Statements of Chief Executive Officers on their codes of conducts

“In a time when the news media is full of stories of business leaders and companies whose actions have engendered public suspicion and mistrust, Pfizer truly stands apart. Pfizer is proud of our record of compliance. Compliance with all relevant statutes and rules is both the legacy of our 150-year history and one of our most important advantages in global business.

- Hank McKinnell, Chairman and Chief Executive Officer, Pfizer

(Source: Pfizer Policies on Business Conduct)

"We try never to forget that medicine is for the people. It is not for the profits. The profits follow, and if we have remembered that, they have never failed to appear."

- George W. Merck: Quoted by Ray Gilmartin, Chief Executive Officer, Merck

(Source: Merck – Code of Conduct)

In the three-party-partnership, dialogue is the main tool for process, progress and reporting. Figure shows a structure of evaluating and reporting social performance, which is applicable to the partnership. It allows evaluation and reporting of the partnership itself (process), the programs of the partnership (progress) and it allows adjustment to new issues.

FIGURE 6: Evaluating and reporting social performance



(Source: Wartick and Wood, 2001: 201)

6.3 Checks and balances

A number of legitimate reporting standards have been developed to address social performance, including the Enhanced Business Reporting Initiative, the Dow Jones Sustainability Indexes (DJSI), AA1000 guidelines, OECD Guidelines for Multinational enterprises, the ISO 14000 series and the SA8000. (Van Rijsbergen, 2004). However, the 'Global Reporting Initiative (GRI) guidelines' is the only reporting framework that exists at an international level. For this reason, a number of pharmaceutical companies have expressed a preference for the development of sector specific GRI guidelines (Pharmaceutical Shareowners Group, 2004:20).

Existing GRI guidelines, which are unspecific to any particular industry, are not a code of conduct but rather a framework for the reporting on an organisation's economic, environmental and social performance (Global Reporting Initiative, 2002)

Findings of a recent World Bank report, in which respondents felt that there was little added value to be achieved from a 'harmonised code', but saw potential in an industry level approach, emphasise the importance of industry specific guidelines (Kolk and van Tulder, 2004:9).

The strengths and benefits of an industry-wide reporting structure are:

- enables comparison between companies and partnerships, increasing the competitiveness to be socially responsible;
- limits opportunity for free-rider behaviour;
- will help to build public trust in the industry as a whole;

6.4 Gatekeepers

As already stated in section 5, a group with the current main stakeholders' representatives from all societal spheres can critically observe process (dialogue), progress (strategy) and results (compliance) of the partnership.

6.5 Post-maturity of an issue: a conformance gap on the rise

An ideals gap is closed. Pharmaceutical companies increasingly acknowledge their responsibilities with regard to providing access to ARV in least developed countries. These companies have also started to act upon it. However, new issues appear at the horizon. Both home countries of the multinational pharmaceutical corporations and other developed countries are still struggling to balance the help to developing countries while maintaining economic and/or political influence (Dumoulin, et al., 2003). This is shown in 2002 when the WTO does not reach an agreement upon import licenses. The new 'mantra' of NGOs, intergovernmental organisations and philanthropists is scaling up. Their attention shifts to middle-income countries, since action on behalf of the least developed countries has proven to be successful. In their view, more and more people need access to ART. With regard to the pharmaceutical companies, it remains unclear how new (patented) ARVs, differential pricing policies and the implementation of TRIPS by all WTO members in 2006 will affect access to ARVs.

Dumoulin (2003: 233) describes three scenarios for the future. The scenario ‘Status Quo’ describes how ARV prices could remain high, when “multinational companies succeed in convincing northern hemisphere countries that both interests match for highest global Intellectual Property Rights.” In the ‘Market Extension’ scenario, Dumoulin indicates a balanced power between of the different stakeholders; prices could be differentiated, allowing generic manufacturers to increase their market share. The final scenario ‘ARVs drugs as a global public good’ describes an international commitment to broad access to ARV drugs in developing countries where manufacturers adapt their strategy to statutory regulations.

The three-party-partnership might avert the negative outcomes of these scenarios for the pharmaceutical companies, governments and NGOs. However, future behaviour by the actors in the three societal spheres will decide whether the latest developments will result in a conformance gap. Either way, the need for change is clear: public pressure with regard to access to ARVs has affected corporate reputation and will do even more so in the future.

6.6 Conclusion

In the three-party-partnership, dialogue is the main tool reporting. It allows evaluation and reporting of the partnership itself (process), the programs of the partnership (progress) and it allows adjustment to new issues. There is a need for an industry-wide reporting structure to enable comparison between companies and partnerships, to limit opportunity for free-rider behaviour and to help building public trust in the industry as a whole.

7 Conclusion and recommendation

7.1 Conclusion

Q: What influence do patent strategies relating to ARV drugs, have on the reputation of pharmaceutical companies?

A: Patent strategies do not yet have a clear *measurable* impact on the reputation of pharmaceutical companies. But with an increase in corporate social initiatives and reporting, corporations will be more critically and extensively monitored, decreasing the scope for reputation risk.

Over the past decade, pharmaceutical companies have individually and collectively as an industry, come under close scrutiny and criticism with respect to steps taken towards making their antiretroviral drugs affordable, to those in need. Attention has been particularly focused on developing countries and their lack of access.

The responsibility of ensuring access to ARV medicines is not sole responsibility of the pharmaceutical industry, but of all stakeholders involved. This constitutes an ideals gap: a difference in opinion on where the responsibility lies. Pharmaceutical companies have come to realise that low levels of corporate social responsibility can lead to increased reputation risk and reputation damage. This potentially results in falling share prices, reduced staff morale (and associated decrease in productivity) and litigation against the company, ultimately resulting in the loss of social ‘license to operate’. Examination of the consumer, capital and labour markets suggest that there is a link between the patent strategies (and actions relating to pricing) that pharmaceutical companies use on their ARV medicines, and their corporate reputation.

Whether companies admit this or not, reputation risk can viewed as one of the main driving forces behind the pharmaceutical industry’s shift in approach to dealing with the global HIV / AIDS epidemic.

Within the consumer market, dissatisfaction with the way in which industry players conduct their business is expressed through boycotts, campaigns, and alike. Reputation damage is most evident in the loss of turnover, but difficulty arises in measuring this as companies will seldom reveal or even admit such losses. Companies do however, noticeably avoid negative confrontation with their consumers.

Within the capital markets, the tools to measure reputation damage are easily accessible (i.e. stock market data), but the interpretation of such data proves more difficult, due to the multitude of factors that effect the capital market on a day to day basis. Often it is difficult to ascertain whether certain events are the root cause of fluctuations in stock prices. In spite of this, analysis does seem to strongly suggest that a company’s stock prices are negatively affected by its actions against patent infringement. Price cuts on the other hand, generally have a positive effect. Indicators of a

company's ability to raise low debt capital, suggest that to date, sustained reputation damage is not a factor involved.

Empirical evidence also seems to suggest that reputation influences the labour market, with reputation rankings notably decreasing in periods of negative media coverage of the pharmaceutical industry's approach to ARV availability. Although considered the least sensitive of the three markets (consumer, labour and capital), it is nonetheless important to the industry.

The primary options (solutions) available to the industry in reducing reputation risk are product donations, patent infringement immunity, forming of partnerships, differential pricing, and voluntary licensing. Of the seven pharmaceutical companies considered, all are involved in a portfolio of these options in different combinations and levels. It has been very difficult to establish which, if any, company engages in 'best practice', due to the complexity of the problem, varying levels of exposure, and lack of measurable results relating to corporate activity in this area. It is therefore inappropriate at this stage in time, to suggest an industry leader.

Implementation of codes of conduct and policies relating to such issues (amongst others) as that of access to ARV medicines varies significantly across the pharmaceutical industry. Currently there is no such universally recognised framework for these codes, or monitoring and reporting progress on corporate social responsibility. The industry is in need of such guidance and regulation.

Partnerships between pharmaceutical companies, governments and NGOs have been a useful and appropriate implementation strategy for increasing access to ARV drugs. Theory suggests that the best solution is three-dimensional, comprising of actors from the three societal spheres; state, market and civil society. Much progress has already been made on the access issue, and in implementing such three dimensional partnership along side other solutions, the pharmaceutical industry together with stakeholders can continue in their efforts to control the devastating HIV / AIDS epidemic.

7.2 Recommendation

Given the sheer size and volume of events and stock market data, further research into the relation of pharmaceutical companies' patent strategies and the companies' stock market prices could give a more detailed view of the reputation effects. Further research could also focus on how other institutions directly influence the reputation of the pharmaceutical companies.

Appendix I

Key events and stock market data

Battling infringement: South African Trade Dispute

05-03-2001 Drugs companies in challenge to South Africa over patent rights

06-03-2001 S Africa judge throws patents trial into doubt

07-03-2001 S Africa trial put on hold till April

19-03-2001 WHO supports S African law on drug patents

16-04-2001 Mandela attacks drug companies over patents

17-04-2001 Patents case holds key for drug groups

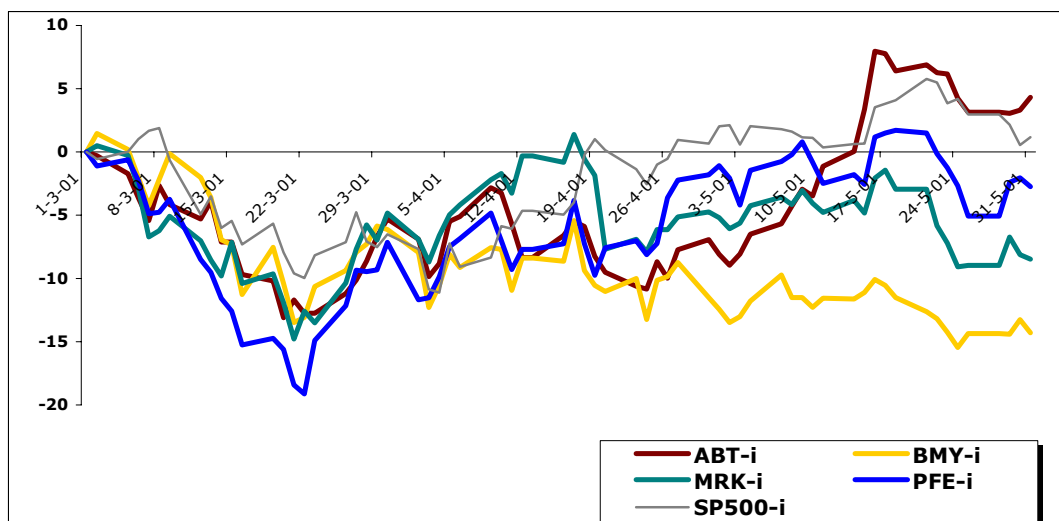
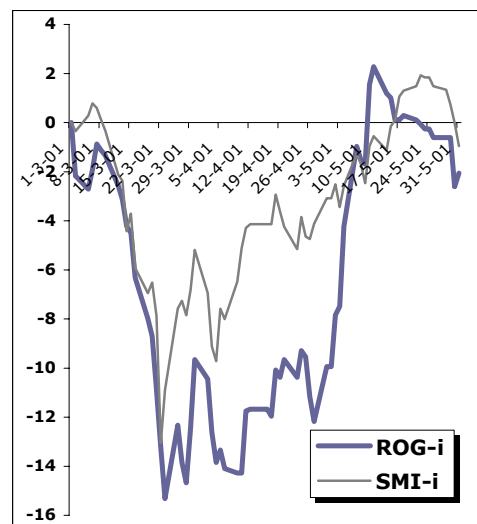
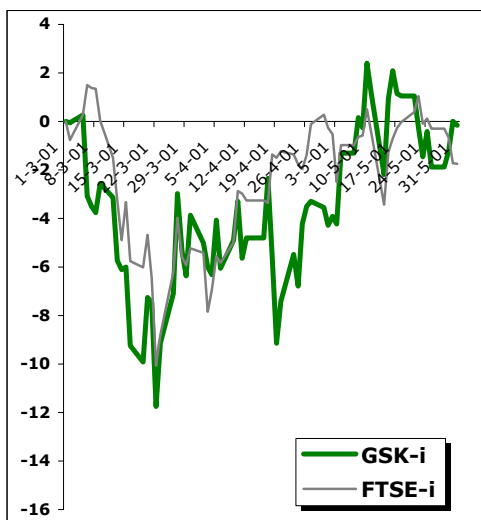
18-04-2001 Drugs companies set to abandon AIDS patent suit

19-04-2001 Drugs groups still seeking patents law deal

22-05-2001 Compromise on cheap AIDS drugs

(Source: Financial Times)

Rate of price changes company stock and index for the period 1/3/2001-31/5/2001



(Source: Thompson, 2004)

Period	ABT	BMV	MRK	PFE	SP500	ROG-VX	SMI	GSK-LN	FTSE ALL
31-05-01	48,61	51,58	69,08	42,89	1255,83	135,50	7487,60	1912,00	2811,22
30-05-01	48,15	52,19	69,36	43,20	1248,08	134,75	7559,00	1915,00	2811,93
29-05-01	48,03	51,50	70,41	43,04	1267,94	137,50	7615,50	1892,00	2841,80
28-05-01	48,07	51,54	68,71	41,86	1277,90	137,50	7661,40	1879,00	2852,69
25-05-01	48,07	51,54	68,71	41,86	1277,90	137,50	7671,90	1879,00	2852,69
24-05-01	48,58	50,87	68,62	42,92	1293,17	138,00	7699,40	1907,00	2864,51
23-05-01	49,48	51,60	70,04	43,55	1289,05	138,00	7699,40	1887,00	2858,36
22-05-01	49,52	52,24	71,08	44,04	1309,38	138,25	7705,80	1910,00	2890,91
21-05-01	49,81	52,57	73,26	44,76	1312,83	138,50	7672,00	1935,00	2872,39
18-05-01	49,59	53,25	73,26	44,85	1291,96	138,75	7658,20	1935,00	2860,21
17-05-01	50,22	53,82	74,39	44,76	1288,49	138,50	7639,80	1937,00	2853,44
16-05-01	50,32	54,11	73,92	44,62	1284,99	138,50	7568,30	1955,00	2840,73
15-05-01	48,17	53,49	71,84	42,97	1249,44	139,75	7548,40	1933,00	2824,97
14-05-01	46,62	53,18	72,58	43,31	1248,92	140,00	7474,90	1873,00	2763,00
11-05-01	46,07	53,22	71,87	43,00	1245,67	141,50	7518,80	1937,00	2847,60
10-05-01	44,99	52,78	72,42	43,74	1255,18	140,50	7488,10	1961,00	2875,47
09-05-01	45,23	53,25	73,18	44,45	1255,54	136,00	7373,40	1910,00	2844,58
08-05-01	44,61	53,25	72,35	44,01	1261,20	136,25	7433,00	1918,00	2842,79
07-05-01	43,96	54,32	72,78	43,77	1263,51	137,00	7463,90	1890,00	2833,13
04-05-01	43,57	53,08	72,28	43,46	1266,61	132,50	7365,60	1890,00	2833,13
03-05-01	42,84	52,35	71,24	42,25	1248,58	128,00	7300,00	1834,00	2789,53
02-05-01	42,43	52,06	70,90	43,19	1267,43	127,50	7369,90	1840,00	2846,05
01-05-01	42,83	52,69	71,55	43,62	1266,44	124,60	7327,20	1833,00	2853,56
30-04-01	43,38	53,25	71,90	43,30	1249,46	124,60	7327,20	1847,00	2869,04
27-04-01	43,00	54,91	71,60	43,12	1253,05	121,50	7248,70	1852,00	2857,79
26-04-01	41,96	54,24	70,84	42,50	1234,52	122,90	7201,90	1848,00	2821,75
25-04-01	42,56	54,07	70,85	40,91	1228,75	125,15	7209,50	1834,00	2804,76
24-04-01	41,55	52,20	69,53	40,52	1209,47	125,50	7269,60	1785,00	2810,33
23-04-01	41,66	54,15	70,27	41,00	1224,36	124,00	7170,70	1810,00	2822,26
20-04-01	42,17	53,54	69,67	40,76	1242,98	125,00	7239,30	1773,00	2825,75
19-04-01	42,76	53,82	74,08	39,80	1253,70	124,00	7286,10	1740,00	2818,19
18-04-01	43,85	54,53	75,05	40,90	1238,16	124,40	7338,50	1808,00	2822,18
17-04-01	44,05	56,91	76,52	42,41	1191,81	121,80	7247,00	1870,00	2765,00
16-04-01	43,53	54,97	74,86	40,90	1179,68	122,20	7247,00	1823,00	2767,85
13-04-01	42,71	55,12	75,24	40,70	1183,50	122,20	7247,00	1823,00	2767,85
12-04-01	42,71	55,12	75,24	40,70	1183,50	122,20	7247,00	1823,00	2767,85
11-04-01	43,95	53,59	73,02	40,00	1165,89	122,10	7235,90	1807,00	2775,90
10-04-01	45,09	55,53	74,19	41,00	1168,38	118,60	7173,50	1852,00	2778,85
09-04-01	45,29	55,63	73,82	41,97	1137,59	118,60	7070,60	1821,00	2718,22
06-04-01	44,22	54,68	72,33	41,08	1128,43	118,85	6954,90	1799,00	2694,42
05-04-01	44,05	55,30	71,72	40,80	1151,44	119,90	6987,50	1837,00	2702,14
04-04-01	42,49	53,82	70,49	39,75	1103,25	119,20	6825,40	1794,00	2662,67
03-04-01	42,01	52,77	68,91	39,02	1106,47	120,90	6870,80	1800,00	2636,55
02-04-01	43,40	55,39	70,27	38,95	1145,87	123,90	7035,30	1819,00	2706,03
30-03-01	44,13	56,48	71,84	40,95	1160,33	125,00	7167,80	1841,00	2711,40
29-03-01	43,49	56,64	70,23	39,99	1147,95	121,15	7044,90	1793,00	2691,44
28-03-01	42,58	55,79	71,13	39,93	1153,29	118,05	6966,90	1813,00	2701,38
27-03-01	41,88	55,40	69,67	39,98	1182,17	119,20	7011,20	1858,00	2747,46
26-03-01	41,39	54,53	67,65	38,74	1152,69	121,30	6987,70	1779,00	2683,31
23-03-01	40,66	53,77	65,29	37,53	1139,83	117,15	6736,10	1740,00	2609,40
22-03-01	40,66	52,30	65,98	35,67	1117,58	120,00	6574,00	1690,00	2573,07
21-03-01	41,15	52,06	64,32	35,98	1122,14	123,30	6965,20	1772,00	2676,31
20-03-01	40,50	53,92	66,49	37,22	1142,62	126,30	7067,60	1776,00	2727,15
19-03-01	41,85	55,64	68,21	37,60	1170,81	127,30	7034,60	1725,00	2688,78
16-03-01	42,09	53,39	67,62	37,37	1150,54	129,60	7112,60	1738,00	2696,19
15-03-01	43,28	55,76	70,09	38,55	1173,57	132,15	7280,00	1800,00	2765,87
14-03-01	43,28	56,00	68,08	39,00	1166,71	132,50	7225,70	1798,00	2721,11
13-03-01	44,78	58,00	69,03	39,90	1197,66	134,00	7380,60	1805,00	2767,52
12-03-01	44,13	58,96	70,18	40,35	1180,16	134,80	7399,80	1855,00	2818,35
09-03-01	44,67	60,10	71,64	42,45	1233,42	136,50	7535,40	1866,00	2861,94
08-03-01	45,36	58,87	70,79	42,00	1264,74	136,80	7569,80	1843,00	2899,58
07-03-01	44,08	57,62	70,42	41,95	1261,90	137,15	7605,20	1848,00	2900,47
06-03-01	44,91	58,96	73,30	43,10	1253,80	135,70	7619,40	1856,00	2904,02
05-03-01	45,80	60,29	75,27	43,83	1241,41	134,60	7581,60	1920,00	2868,74
02-03-01	46,46	61,05	75,86	43,61	1234,18	135,35	7533,50	1914,00	2839,20
01-03-01	46,60	60,17	75,48	44,10	1241,23	138,35	7560,20	1915,00	2861,07

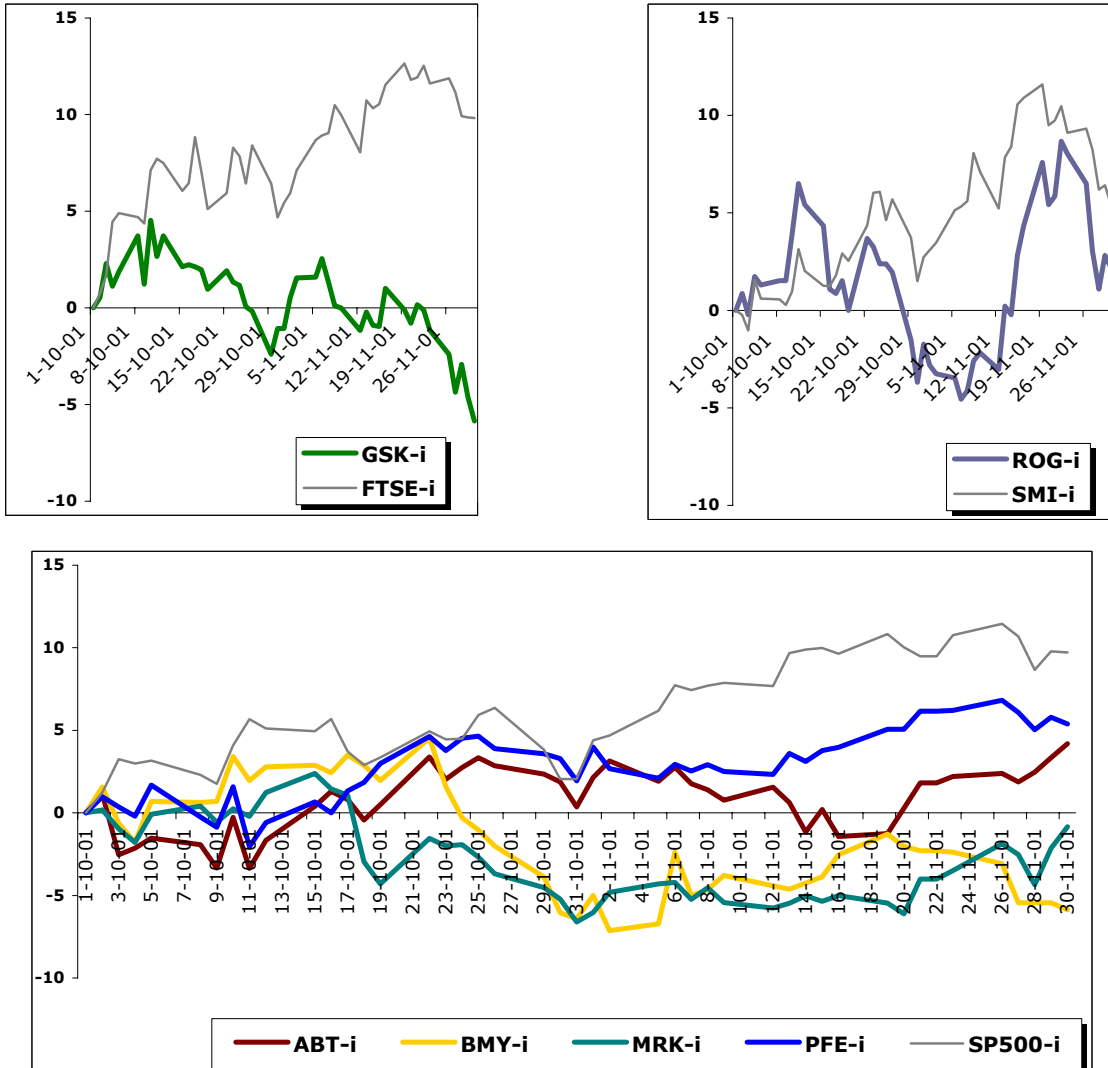
(Source: Thompson, 2004)

Advocating legal protection: WTO negotiations

Doha

- 17-10-2001 Campaigners attack drug companies on AIDS patents
 - 25-10-2001 Stage set for clash at WTO meeting over drug patents
 - 15-11-2001 Declaration on patent rules cheers developing nations
- (Source: Financial Times)

Rate of price changes company stock and index for the period 1/10/2001-30/11/2001



(Source: Thompson, 2004)

Period	ABT	BMJ	MRK	PFE	SP500	ROG-VX	SMI	GSK-LN	FTSE ALL
20-11-01	49,51	55,95	60,71	43,18	1142,66	121,50	6481,60	1855,00	2559,51
19-11-01	48,75	56,38	61,13	43,18	1151,06	124,00	6605,60	1868,00	2578,75
16-11-01	48,66	55,66	61,43	42,73	1138,65	120,25	6565,00	1889,00	2553,67
15-11-01	49,48	54,90	61,20	42,65	1142,24	118,50	6544,80	1852,00	2530,77
14-11-01	48,80	54,68	61,42	42,38	1141,21	115,00	6416,70	1853,00	2525,71
13-11-01	49,68	54,47	61,12	42,58	1139,09	115,50	6384,60	1866,00	2535,07
12-11-01	50,14	54,59	60,93	42,06	1118,33	111,75	6229,10	1848,00	2473,67
09-11-01	49,76	54,95	61,15	42,13	1120,31	112,75	6341,00	1870,00	2517,79
08-11-01	50,06	54,45	61,73	42,30	1118,54	112,25	6396,80	1872,00	2529,53
07-11-01	50,24	54,26	61,27	42,14	1115,80	110,50	6251,30	1895,00	2496,25
06-11-01	50,74	55,76	61,94	42,31	1118,86	110,00	6234,80	1918,00	2493,45
05-11-01	50,32	53,27	61,88	41,96	1102,84	111,25	6223,70	1900,00	2488,05
02-11-01	50,92	53,04	61,55	42,20	1087,20	111,50	6125,20	1899,00	2452,16
01-11-01	50,43	54,26	60,76	42,74	1084,10	112,00	6102,80	1880,00	2425,40
31-10-01	49,55	53,45	60,39	41,90	1059,78	113,25	6081,00	1850,00	2413,50
30-10-01	50,30	53,66	61,28	42,45	1059,79	111,00	6008,00	1850,00	2396,59
29-10-01	50,53	54,90	61,74	42,57	1078,30	113,50	6140,30	1825,00	2436,61
26-10-01	50,78	55,96	62,28	42,70	1104,61	117,50	6256,70	1867,00	2481,68
25-10-01	51,02	56,52	62,93	43,01	1100,09	118,00	6193,30	1871,00	2436,62
24-10-01	50,73	56,94	63,41	42,96	1085,20	118,00	6279,40	1892,00	2469,06
23-10-01	50,37	58,02	63,37	42,65	1084,78	119,00	6276,80	1895,00	2479,11
22-10-01	51,05	59,70	63,66	43,00	1089,90	119,50	6176,90	1906,00	2425,23
19-10-01	49,62	58,23	61,88	42,33	1073,48	115,25	6070,30	1888,00	2406,13
18-10-01	49,16	58,76	62,75	41,86	1068,61	117,00	6092,40	1907,00	2450,48
17-10-01	49,77	59,11	65,35	41,65	1077,09	116,25	6025,60	1910,00	2491,71
16-10-01	50,02	58,50	65,60	41,10	1097,54	116,50	5993,00	1912,00	2437,11
15-10-01	49,57	58,76	66,20	41,37	1089,98	120,25	5994,40	1910,00	2427,92

(Source: Thompson, 2004)

Import licenses

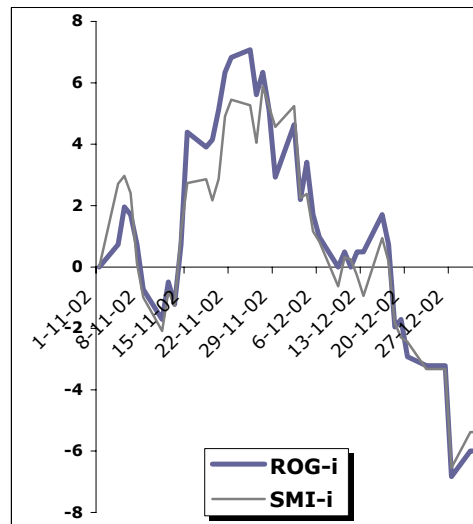
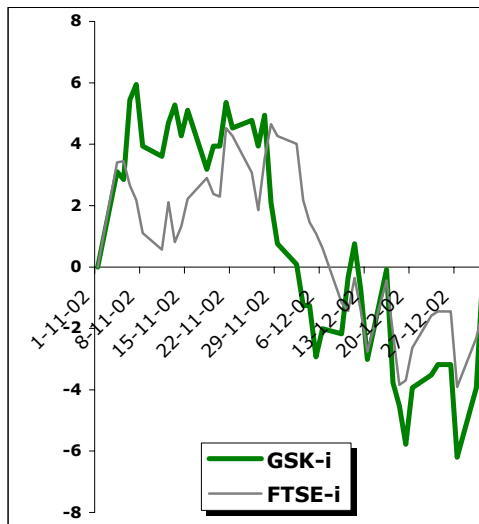
16-11-2002 Cheap drugs boosts trade talk

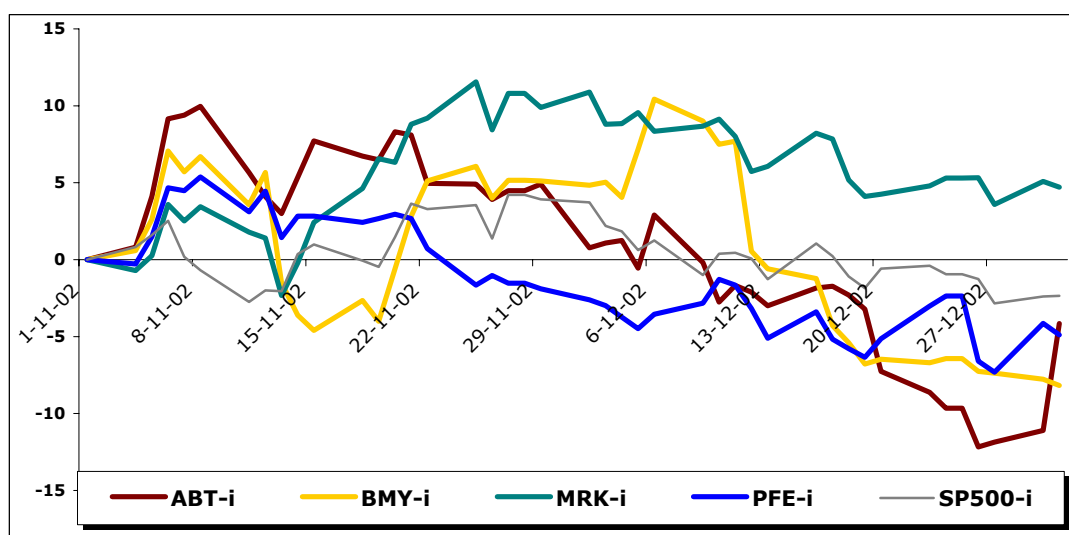
29-11-2002 UK move to end deadlock on essential drugs

21-12-2002 Last push WTO pact on generic medicines

(Source: Financial Times)

Rate of price changes company stock and index for the period 1/10/2001-30/11/2001 in %





(Source: Thompson, 2004)

Period	ABT	BMY	MRK	PFE	SP500	ROG-VX	SMI	GSK-LN	FTSE ALL
25-12-02	35,26	23,59	53,88	31,38	892,47	99,20	4731,30	1156,00	1893,09
24-12-02	35,26	23,59	53,88	31,38	892,47	99,20	4731,30	1156,00	1893,09
23-12-02	35,66	23,52	53,62	31,17	897,38	99,20	4731,30	1152,00	1890,54
20-12-02	36,19	23,58	53,34	30,49	895,75	99,50	4774,60	1147,00	1870,30
19-12-02	37,78	23,50	53,27	30,10	884,25	100,75	4781,60	1125,00	1850,02
18-12-02	38,13	23,85	53,82	30,28	891,12	100,50	4804,60	1140,00	1847,11
17-12-02	38,35	24,13	55,18	30,48	902,99	103,25	4902,30	1149,00	1879,20
16-12-02	38,31	24,90	55,37	31,05	910,40	104,25	4940,10	1193,00	1912,51
13-12-02	37,86	25,06	54,27	30,50	889,48	103,00	4847,70	1158,00	1867,89
12-12-02	38,21	25,35	54,10	31,12	901,59	103,00	4880,00	1185,00	1893,63
11-12-02	38,37	27,15	55,26	31,61	904,96	102,50	4905,80	1203,00	1913,99
10-12-02	37,95	27,10	55,84	31,73	904,45	103,00	4909,30	1190,00	1893,44
09-12-02	38,95	27,48	55,60	31,23	892,00	102,50	4863,00	1168,00	1898,57
06-12-02	40,16	27,84	55,43	31,00	912,23	103,50	4934,80	1170,00	1932,66
05-12-02	38,81	27,02	56,06	30,70	906,55	104,25	4950,70	1159,00	1941,83
04-12-02	39,51	26,23	55,69	30,94	917,57	106,00	5010,40	1179,00	1948,96
03-12-02	39,45	26,48	55,67	31,18	920,75	104,75	5004,00	1179,00	1962,67
02-12-02	39,33	26,43	56,74	31,30	934,53	107,25	5150,50	1195,00	1998,01
29-11-02	40,95	26,50	56,23	31,53	936,31	105,50	5117,50	1203,00	2002,97
28-11-02	40,78	26,51	56,69	31,65	938,87	107,75	5149,90	1219,00	2010,27
27-11-02	40,78	26,51	56,69	31,65	938,87	109,00	5181,90	1253,00	1988,62
26-11-02	40,55	26,22	55,48	31,81	913,31	108,25	5092,00	1241,00	1956,55
25-11-02	40,95	26,74	57,08	31,61	932,88	109,75	5151,60	1251,00	1979,87
22-11-02	40,96	26,50	55,87	32,37	930,55	109,50	5160,80	1248,00	2003,05
21-11-02	42,19	25,92	55,67	33,00	933,76	109,00	5134,30	1258,00	2007,72
20-11-02	42,27	25,06	54,40	33,09	914,15	107,75	5034,30	1241,00	1965,00
19-11-02	41,56	24,20	54,53	33,00	896,74	106,75	5000,20	1241,00	1966,60
18-11-02	41,66	24,54	53,53	32,92	900,36	106,50	5033,90	1232,00	1976,67

(Source: Thompson, 2004)

GSK: Cutting down the costs

12-02-2001 Oxfam urges charitable stance on drugs patents

12-02-2001 GSK facing crusade over drugs for poor; INVESTORS SUPPORT OXFAM CAMPAIGN

16-02-2001 GSK to review drug pricing policy

22-02-2001 Glaxo cuts price of HIV medicine

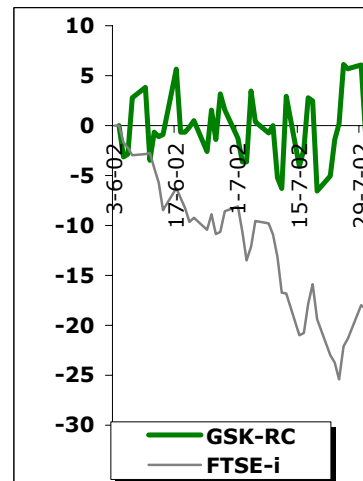
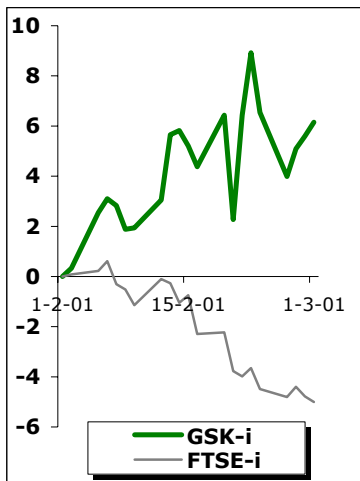
11-06-2001 GSK to extend cheaper Aids drugs

20-06-2002 GSK announces two-year price freeze on HIV/AIDS medicines

06-09-2002 GSK cuts its drug prices for poor countries

28-04-2003 GlaxoSmithKline again reduces its not-for-profit price of HIV/AIDS medicines for the developing world

(Source: Financial Times)



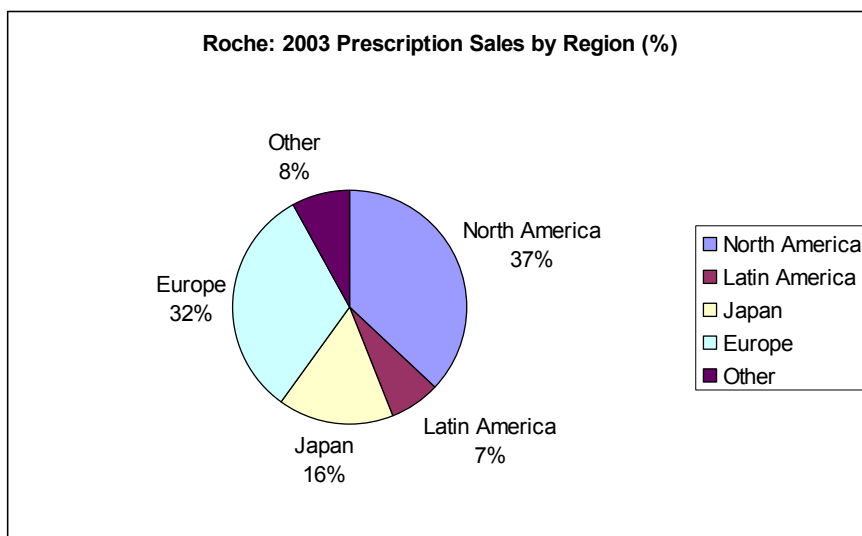
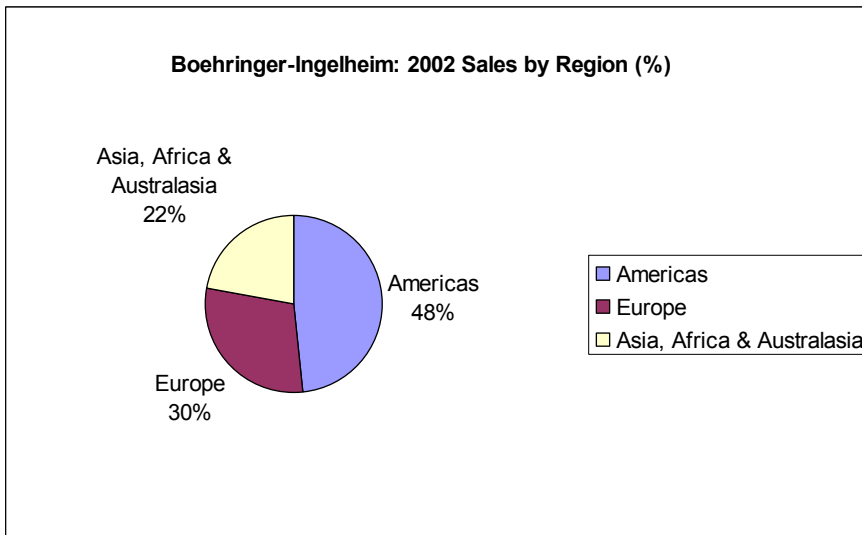
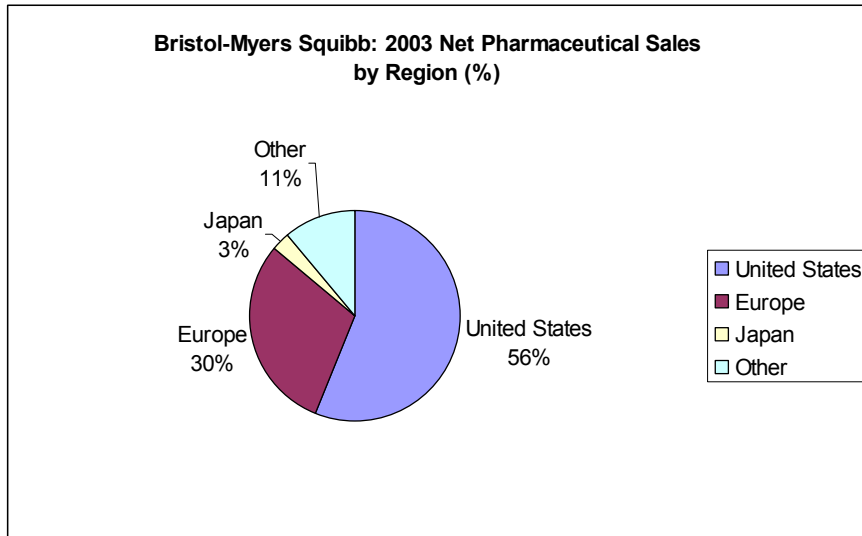
(Source: Thompson, 2004)

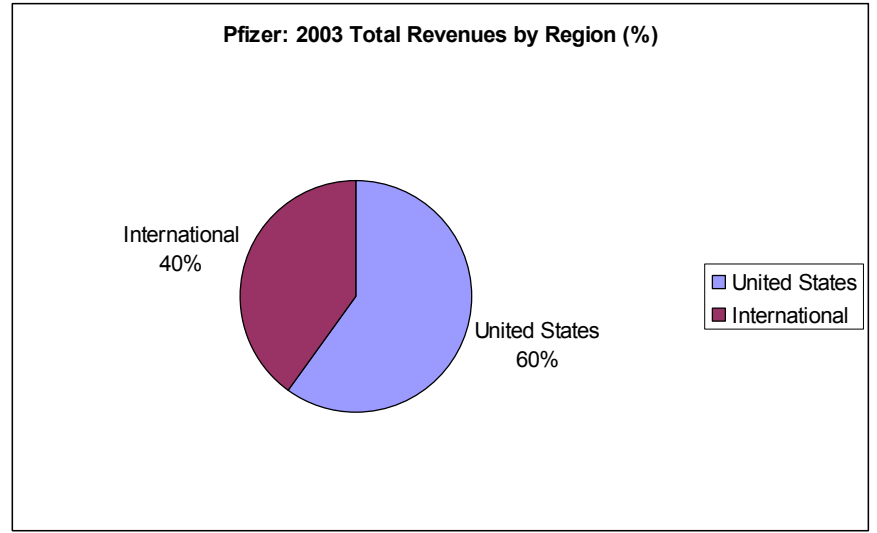
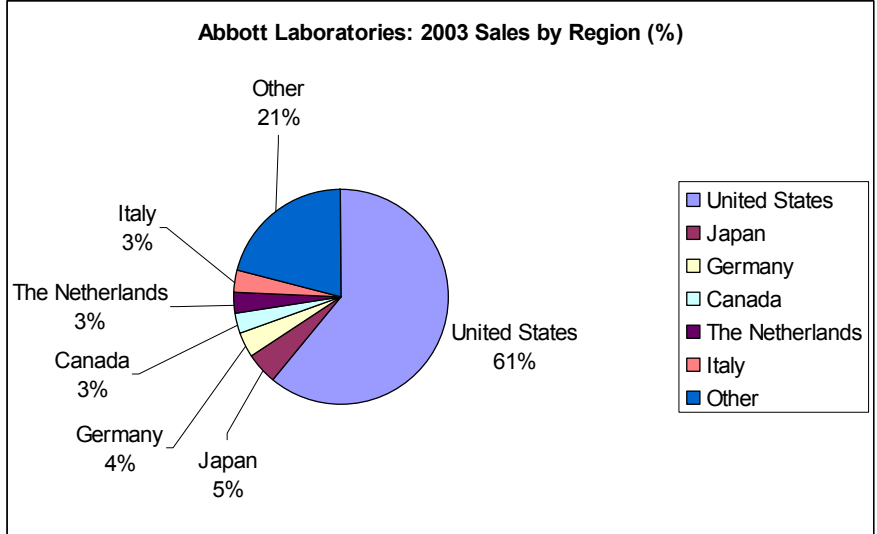
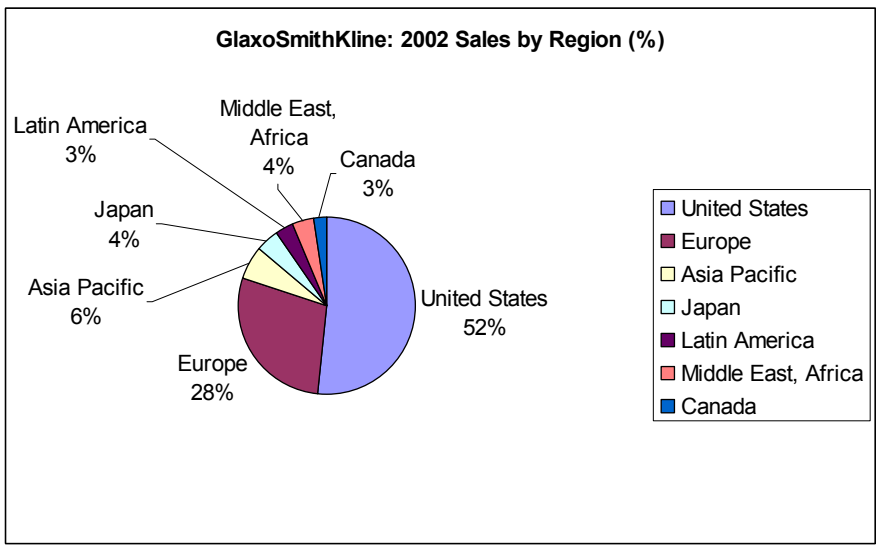
Period	GSK-LN	FTSE ALL	Period	GSK-LN	FTSE ALL
15-06-01	1988,00	2770,04	30-04-03	1254,00	1891,50
14-06-01	1985,00	2787,16	29-04-03	1229,00	1890,51
13-06-01	1982,00	2819,51	28-04-03	1257,00	1893,48
12-06-01	1981,00	2814,87	25-04-03	1253,00	1863,06
11-06-01	1968,00	2842,08	24-04-03	1227,00	1877,05
8-06-01	1980,00	2881,26	23-04-03	1265,00	1905,93
7-06-01	1992,00	2879,33	22-04-03	1238,00	1881,00
6-06-01	1970,00	2859,37	21-04-03	1225,00	1867,76
5-06-01	1971,00	2867,08	18-04-03	1225,00	1867,76
1-03-01	1915,00	2861,07	12-09-02	1240,00	1978,31
28-02-01	1905,00	2868,00	11-09-02	1280,00	2032,68
27-02-01	1896,00	2879,53	10-09-02	1246,00	2016,80
26-02-01	1876,00	2867,10	9-09-02	1213,00	1967,65
23-02-01	1922,00	2876,89	6-09-02	1211,00	1987,27
22-02-01	1965,00	2901,92	5-09-02	1195,00	1945,76
21-02-01	1920,00	2892,00	4-09-02	1189,00	1955,87
20-02-01	1845,00	2898,38	3-09-02	1167,00	1959,34
19-02-01	1920,00	2944,93	2-09-02	1198,00	2026,35
16-02-01	1883,00	2942,94	26-06-02	1353,00	2206,42
15-02-01	1898,00	2989,48	25-06-02	1372,00	2256,00
14-02-01	1909,00	2980,40	24-06-02	1351,00	2217,32
13-02-01	1906,00	3003,92	21-06-02	1387,00	2246,82
12-02-01	1859,00	3008,89	20-06-02	1380,00	2236,60
9-02-01	1839,00	2977,54	19-06-02	1382,00	2270,73
8-02-01	1838,00	2996,34	18-06-02	1391,00	2296,41
7-02-01	1855,00	3002,60	17-06-02	1400,00	2320,41
6-02-01	1860,00	3030,32	14-06-02	1325,00	2265,83
5-02-01	1850,00	3018,72			

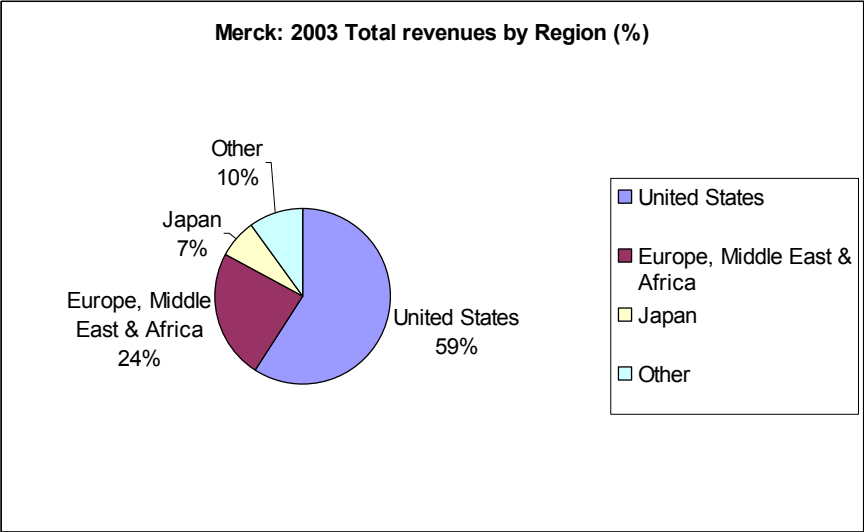
(Source: Thompson, 2004)

Appendix II

Geographical Analysis of Pharmaceutical Company Markets







Appendix III

Analysis of Pharmaceutical Company Code of Conduct

Code of conduct includes topics regarding:	Companies:						
	MRK	BMY	ABT	PFE	ROG	GSK	BOE
1.1 Social	yes	yes	yes	yes	yes	no	no
1) employment	no	no	no	no	no	no	yes
2) training	yes	yes	yes	yes	yes	no	yes
3) working conditions	no	yes	yes	no	no	no	no
4) industrial relations	yes	no	no	yes	no	no	no
5) force	yes	no	no	yes	no	no	no
1.2 Environment	yes	no	yes	yes	no	no	yes
1) management policies & systems	no	yes	yes	no	no	no	no
2) input/output inventory	no	yes	yes	no	no	no	no
3) finance	no	no	yes	no	no	yes	no
4) stakeholder relations	no	no	yes	no	no	no	no
5) sustainable development	no	no	no	no	yes	no	yes
1.3 Generic	yes	yes	yes	yes	yes	no	yes
1) consumer interests	yes	No	yes	yes	yes	no	no
2) community interests	yes	yes	no	no	no	no	no
3) global development	yes	yes	yes	yes	no	yes	no
4) ethics	yes	yes	yes	yes	yes	yes	no
5) legal requirements	yes	yes	yes	yes	yes	yes	no
2.1 Organizations targeted	general	general	general	firms	general	partners & internal	general
2.2 Geographic scope	general	general	general	general	general	general	general
2.3 Nature	Moderate	general	moderate	moderate	moderate	none	moderate
3.1 Quantitative standards	none	none	medium	none	none	none	none
3.2 Time horizon	none	none	none	none	none	none	none
3.3 Reference	international	none defined	international	none	none	worldwide	none
4.1 Monitoring systems & processes	none	none	clear-vague	Clear	none	none	Vague
4.2 Position of monitoring actor	1st party	4th party	4th party	4th	1st	none	1st
4.3 Sanctions	mild	mild	severe	severe	none	mild	none
4.4 Sanctions to third parties	mild	none	none	none	none	none	none
4.5 Financial commitment	none	none	none	none	moderate	none	none
4.6 Management commitment	none	implicit	implicit	explicit	implicit	implicit	explicit
Pages	25	25	online	46	2	2	1

ROG: Roche – Code of Conduct http://www.roche.com/paees/downloads/companv/pdf/corp_principles.pdf

BMY: Bristol-Myers Squibb – Code of Conduct http://www.bms.com/aboutbms/corporate_governance/content/data/sbcdad2.pdf

BOE: Boehringer Ingelheim – Code of Conduct <http://www.boehringer-ingelheim.com/corporate/corp/rimg/politica.pdf>

PFE: Pfizer – Pfizer Policies of Business Conduct 2003 http://www.pfizer.com/download/investors/corporate/business_conduct_policies_summary_2003.pdf

GSK: GlaxoSmithKline – Code of Conduct <http://www.gsk.com/about/corp-gov/Policy-Code-Conduct.pdf>

ABT: Abbott Laboratories – Code of Conduct <http://www.abbott.com/citizenship/citizenship.cfm>

MRK: Merck – Code of Conduct http://www.merck.com/about/cr/policies_performance/pdf/code_of_conduct.pdf

Appendix IV

Overview of Pharmaceutical Company CSR initiatives

	ABT	BOE	BMI	GLK	MRK	PFE	ROG
Product Donation / Sponsorship	<p>'Step Forward ... for the world's children' is an initiative to provide care and support for children in Burkina Faso, India, Romania and Tanzania, orphaned as a result of AIDS. Abbott does not disclose how much the company has invested in the project, maintaining, "It is about what you do, not about how much you spend." (Blum, 2000)</p> <p>'Determine' HIV Donation Program: More than 670,000 free rapid tests were provided by the end of 2003 in the developing world, with the aim of reducing mother-to-child transmission.</p>			<p>In 2003, the company donated £1.16 million worth of drugs</p>	<p>Anti AIDS program (initiated in 2000) – African Comprehensive HIV/AIDS Partnership (ACHAP). Merck, in Botswana and the Bill and Melinda Gates Foundation, committed to spend 50 million U.S. dollars in contributing to medicines within Botswana, over the next five years (Blum, 2000). Assisting children who have lost parents to the disease through funding of daycare, meals, clothes, education and psychological support, the company is "striving to develop a comprehensive and sustainable approach to HIV prevention, care and treatment." (Merck Annual Report, 2003)</p> <p>Patient Assistance Program – in the United States, Merck offers prescription medicines free of charge through physicians to those earning below a set threshold income. (Merck Annual Report, 2003)</p>	<p>Recognising that some countries are unable to afford drugs, even at heavily discounted prices, Pfizer prefers to focus on donations rather than differential pricing. (Pharmaceutical Shareowners Group, 2004)</p> <p>The Diflucan Partnership Program: a public-private venture between Pfizer, ministries of health, local clinicians and non-governmental agencies in 22 developing countries hit hardest by AIDS. The company began donating Diflucan in 2000 and has committed million U.S. dollars to the program.</p> <p>The Infectious Diseases Institute, sponsored by Pfizer is an effort to educate and train healthcare professionals in the prevention and treatment of HIV/AIDS in Uganda and surrounding region.</p> <p>Pfizer supports and helps staff the 'Global Health Fellow Program', through the provision of technical assistance, knowledge and skills.</p>	<p>Due to the long term sustainability issue, Roche abstain from donating with the exception of 'emergency relief' or in cases meeting the WHO guidelines for drug donations". (Pharmaceutical Shareowners group, 2004)</p>
Patent Infringement Immunity			<p>The company has stated that patents "will not stand in the way of inexpensive HIV/AIDS therapy being made available in sub-Saharan Africa." (2003 Sustainability Report)</p>				<p>Having undertaken financial analysis to ascertain the impact of granting patent infringement immunity in least developed countries and Sub-Saharan Africa, Roche concluded that effects would be minimal. (Pharmaceutical Shareowners Group, 2004)</p> <p>Roche has a specific HIV/AIDS patent policy: "Roche will not file patents on new antiretroviral therapies in the Least Developed Countries and sub-Saharan Africa. Roche will not take action against generic versions of its antiretroviral therapies where Roche holds, or has licensed-in, the patent in the Least Developed Countries and in sub-Saharan Africa" (Roche's Sustainability Report, 2003)</p>

Partnerships	ABT Accelerating Access Initiative (AAI). 'Health Care Infrastructure and Systems' – a partnership between Abbott and the Tanzanian government to improve Tanzania's public health infrastructure and ability to look after HIV patients.	BOE Accelerating Access Initiative (AAI).	BMI Accelerating Access Initiative (AAI).	GLK Accelerating Access Initiative (AAI). 'Positive Action' - Established in 1992, this is a partnership with 31 organizations including the Centre for African Family Studies (CAFS), helping to address issues such as discrimination.	MRK Accelerating Access Initiative (AAI).	PFE Medical Education for South African Blacks (MESAB) The AIDS Support Organization (TASO) of Uganda The Cambodian branch of Pact, a Washington, D.C.-based group that helps smaller NGOs around the world become self-sustaining.	ROG Accelerating Access Initiative (AAI). Roche is also involved in public private partnerships in cooperation with local and international aid organisations on such project is the Phelophepa Health Care Train in South Africa, which supplies medicines to remote areas.
Differential Pricing	'Abbott Access' - providing 68 developing countries with HIV medicines at a loss to Abbott.		Bristol-Myers Squibb provides 23 countries across Sub-Saharan Africa with ARV drugs at below cost price.	GSK has been operating differential pricing of its ARVs since 1997, and in 2003 the company had 175 supply arrangements with 56 countries for differentially priced anti-retrovirals GSK has been a leading example in implementing differential pricing. Whilst public sector ARV drug prices are negotiated on a case by case basis in middle income countries, not-for-profit prices operate in over 100 other countries including Sub-Saharan Africa, low developed countries (as defined by the UN), employers in Sub-Saharan Africa that provide HIV/AIDS treatment to their staff, and to fully-funded Global Fund projects. (Pharmaceutical Shareowners Group, 2004)	In 2002, Merck introduced the provision of <i>Stocrin</i> , one of its AVR medicines, to least developed countries and those suffering most from the HIV/AIDS epidemic, at a cost of less than one U.S. dollar per day. (Merck Annual Report, 2003)		Roche provide two of its HIV medicines in the public and private sectors of Sub-Saharan Africa and low developed countries at not-for-profit prices. They do however still vary from country to country as these drugs are distributed directly, therefore import taxes and transportation costs need to be taken into account. (Pharmaceutical Shareowners Group, 2004)
Voluntary Licensing			Bristol-Myers Squibb has granted a voluntary license to Aspen Pharmacare, South Africa (to supply South Africa and 47 other Sub-Saharan countries), (Pharmaceutical Shareowners Group, 2004)	GlaxoSmithKline has granted four voluntary licenses to Thembalami (South Africa), Aspen Pharmacare (South Africa), Feza (South Africa), and Cosmos Ltd (Kenya)	Merck has granted a voluntary license to Thembalami, South Africa (to supply South Africa other countries in the Southern African Development Community) – covering public and private sector. (Pharmaceutical Shareowners Group, 2004)		

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