Expanding Global Health Access:

A Comparative Analysis of Pharmaceutical Corporate Social Responsibility Initiative

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April 25, 2007

Introduction:

In recent years, critics have challenged pharmaceutical companies for failing to meet their ethical obligations of facilitating access to life-saving drugs for the poor of the developed and developing worlds. With impending public health crises and widening global health disparities, concerned consumers, government officials, and health practitioners have pressured pharmaceutical companies to engage in neglected-disease R&D, to support public health initiatives, and to adopt transparent pricing and patent policies. Consequently, the industry has replied with an economic and legal defense for its actions, often engendering a communication gap between the largest corporate players on one hand and poor nations and developed world critics on the other.[1]

Nevertheless, as society has come to expect socially responsible behavior in response to the global HIV/AIDS pandemic and other health crises, pharmaceutical companies have adapted to the existent socioeconomic reality by developing a series of corporate citizenship initiatives aimed at improving access in the developing world. Although global poverty and poor health conditions remain the main responsibility of the world's national governments and international organizations, private enterprises have played an increasingly important role in transferring unique technologies and leveraging their core competencies to facilitate social progress through cash donations, in-kind contributions, and public-private partnerships. Despite organizational capability limitations and the lack of a formal societal mandate, these enterprises have defined their own ethics of corporate citizenship, recognizing that the possession of a unique capacity to respond to a devastating catastrophe creates a mandatory obligation of rescue.[2]

Logically, pharmaceutical companies have consistently led the nation in corporate philanthropy, contributing at least five times greater than the national average.[3] Ranging from donating medicines to promoting education and the arts, corporate social responsibility initiatives of leading pharmaceutical companies aim to protect the global environment, invest in local communities, and expand access to drugs. In the developing world, companies donate medicines and work closely with national governments to improve health care systems and general health through building infrastructure, improving water supply, and providing health and nutritional education. Nevertheless, despite these clear benefits, corporate philanthropy programs remain largely fragmented and poorly audited, often with dubious formal social impact review. Although the public-private partnership approach potentially delivers the best health outcomes for developing country patients[4], managing accountability, building mutual institutional trust, and delineating clear roles and responsibilities pose serious challenges. As pharmaceutical companies seek out more partnership opportunities with NGOs, governments, and supranational institutions, quality over quantity of associations has emerged as a primary concern, especially in light of disparate philanthropy focuses and minimal industry-wide coordination. Competitively, the need to outdo other industry players or at least ascertain parity in corporate citizenship has

[1] DeGeorge, Richard. "Intellectual Property and Pharmaceutical Companies: An Ethical Analysis." Business Ethics Quarterly. Vol. 15, No. 4. October 2005.
[2] Dunfee, Thomas. "Do Firms with Unique Competencies for Rescuing Victims of Human Catastrophes have Speical Obligations?" Business Ethics Quarterly. Vol. 16, No. 2. May 2006.
[3] "Pharmaceutical Companies Lead the Way in Corporate Philanthropy." Phrma. January 2004.
[4] Moran, Mary. "A Breakthrough in R&D for Neglected Diseases: New Ways to Get the Drugs We Need." PLoS Medicine. Vol. 2, No. 9. September 2005.

further intensified the need to develop a systematic method of evaluating and comparing corporate contributions to assure a high level of quality. In short, since corporations gain reputation benefits from engaging in corporate philanthropy and partnering with well-known foundations and NGOs, measures should be established to prevent companies from garnering reputational support without providing the requisite quality and quantity of contribution, as in the case of bluewashing, partnering with the UN, or greenwashing, partnering with well-known environmental groups.

Given very few industry-wide reviews of pharmaceutical company corporate social responsibility programs, this paper intends to provide a critical analysis of global medicine access initiatives by the three largest pharmaceutical companies, determined on the basis of 2005 global revenues. First, this paper will provide an overview of the growing corporate citizenship movement and the unique core competencies of the private sector in contributing to global health. Second, at a firm-level view, the paper will describe each company's major initiatives and involved partners, resources committed, and overall health impact. Third, the paper will adopt an industry-level view to determine common enumerated priorities, diseases covered in socially-motivated R&D, preferential pricing systems, and overall resource commitments in order to assess the sufficiency of corporate social responsibility programs in facilitating the purported goal of increased health access. Finally, the paper will conclude with industry-level recommendations on methods to maximize the efficacy of access initiatives, as well as identify key areas of incentive restructuring in order to increase social impact.

The central argument of the paper is as follows: Despite increased corporate philanthropy contributions through the support of public-private partnerships, drug donations, R&D commitments, and preferential pricing systems, the lack of industry coordination and the absence of a systematic social audit has greatly reduced transparency, comparability, and accountability. Although pharmaceutical companies have individually pursued programs at a level substantially higher than that of conventional corporations, resource commitments still fall short of the industry's normative obligations, risking the potential use of philanthropy and donations as a "bait and switch" tactic to divert attention away from comprehensive reforms in pricing and access.

Pharmaceutical Company Corporate Citizenship

Growth in Corporate Social Responsibility

The growing recognition of the benefits of competitive corporate philanthropy has prompted a steady increase in corporate contributions. Overall, empirical studies have shown that a strong corporate philanthropy program effectively retains and attracts talented employees, increasing loyalty, satisfaction, and overall productivity.[5] The three most commonly cited reasons for corporate philanthropy are as follows. First, building a reputation as a responsible business strengthens customer, distributor, and supplier equity. Many consumers express a strong preference for products from ethical businesses, while companies and governments prefer suppliers with responsible policies in order to minimize the risk of reputational damage. Second,

[5] Jones, Ashley. "Good Deeds Do Pay Off – Corporate Philanthropy Shown to Increase Employee Loyalty." First Door, 2001.

corporation charitable efforts can improve competitive context – the quality of the business environment in the locations where they operate.[6] For example, by setting preferential pricing systems, building brand recognition globally, partnering with leading health NGOs and governments, and penetrating new markets through corporate philanthropy programs, pharmaceutical companies can leverage philanthropy to align social and economic goals, thus improving a company's long-term business prospects through increased market access. Third, community investment activities generate positive press coverage and build good relationships with local authorities and investors, thus facilitating future business and financing opportunities. For example, Merck's successful ivermectin program generated strong positive press that led to revenue growth, high brand identification, investor confidence, and greater leverage in lawsuits and negotiations.[7]

Not surprisingly, corporate contributions have grown substantially in the last decade. According to the Committee to Encourage Corporate Philanthropy (CECP), the median giving as a percent of pre-tax profit in 2006 was 0.86% and the median total giving $28.95 million, summarized below.

Table 1. Corporate Philanthropy in 2006

	Median Total Giving (millions)	Median Total Giving as % of Revenue	Median Total Giving as % of Pre-Tax Profit	Median Total Giving per Employee
All Companies	28.95	0.14%	0.86%	636
Fortune 100 Companies	69.18	0.14%	0.79%	670

Source: CECP, 2006

Overall, in the past year, corporate donations grew by an unprecedented 22.5% to reach an estimated $13.77 billion. At 5.3% of the total estimate for all charitable gifts, corporations account for a slightly larger slice of the pie than the average 5% given by corporations in the past forty years.[8] Exhibit 1 (Appendix) illustrates the average percentage industry breakdown of total giving by program area.

Normative Obligations: Why the pharmaceutical industry and not just governments?

According to Thomas Dunfee, Professor of Social Responsibility in Business at the Wharton School, firms possessing a unique human catastrophe[9] rescue competency have a moral

[6] Porter, Michael. "Competitive Advantage of Corporate Philanthropy." Harvard Business Review, 2002.
[7] Collins, Kimberly. "Profitable Gifts: A History of the Merck Mectizan Donation Program and Its Implications for International Health." Perspectives in Biology and Medicine. Vol. 47, No. 1 (100-109). Winter, 2004.
[8] "Charitable Giving Rises 6% to More than $260 Billion." Giving USA Foundation. June, 2006.
[9] Dunfee defines catastrophe as involving "a momentous tragic event marked by effects ranging from extreme misfortune to utter overthrow and ruin". To ensure that the phrase "grave human catastrophe" is narrowed sufficiently, Dunfee assumes the following three conditions: (1) the harms must involve severe physical injury, deprivation, or death; (2) the harms affect a substantial human population; (3) the harms must be immediate rather than projected.

obligation to devote substantial resources toward best efforts to stymie the crisis. In regards to hard metrics, Dunfee suggests that unless financial exigency justifies a lower level of investment, such companies should devote, at a minimum, the largest sum of (1) the most recent year's investment in social initiatives, (2) the five-year average of investment in social initiatives, (3) the industry's average investment in social initiatives, or (4) the average investment in social initiatives by home-nation firms. In light of the HIV/AIDS crisis, severe health inadequacies in the developing world, recent natural disasters, and viral scares, pharmaceutical companies have the unique core competency to supplement public sector initiatives through drug manufacturing, research, and procurement. In short, Dunfee argues that since very few agents possess the capacity to address such crises, pharmaceutical companies have a moral obligation to provide as much support as financially sustainable. In most cases, through repricing strategies and R&D efforts, pharmaceutical companies can employ unique strategies to combat the catastrophe. Due to patent protection, productive resources, and specialized knowledge, the case can be made that pharmaceutical companies have comparative advantages over other possible providers, including other private sector participants, NGOs, and government agencies.[10]

In the current age of globalization, the private sector has generated extraordinary global networks and revenue streams that have dwarfed public sector budgets of supranational institutions and developing world governments. Of the world's largest economic entities, 51 are now corporations and only 49 are countries, with the world's top 200 corporations accounting for over a quarter of economic activity on the globe.[11] More compellingly, global pharmaceutical companies themselves have recognized a fundamental moral commitment to improving human well-being. For example, GlaxoSmithKline has declared its core mission as "a global quest to improve the quality of human life by enabling people to do more, feel better, and live longer"[12], and Merck's value statement affirms that all corporate actions must be measured in relation to the company's principal objective of preserving and improving human life.

In contrast, Milton Friedman's conventional view holds that since corporations have a primary moral obligation to maximize economic return for investors, companies should not engage in philanthropy, but rather, allow individual investors to determine fund allocation. In opposition to this framework, pharmaceutical companies can provide drug donations more efficiently and effectively than individual investors due to their unique core competency and cost structures. Moreover, business theorists argue that corporate stockholders in their dual role as stockholders and members of the social community, share with all others the obligation to act, or to follow a rule governing a class of acts, that will maximize public welfare. For these reasons, stockholders should expect corporate officers to obey the law and advance the public welfare in the exercise of practical business judgments, thus justifying the use of corporate funds to support quality-of-life, community projects.[13] More fundamentally, theories of corporate citizenship have suggested that since corporations, as persons before the law, extract benefit from the community and depend on government and consumer support, philanthropy is morally justifiable on the

[10] Dunfee, Thomas. "Do Firms with Unique Competencies for Rescuing Victims of Human Catastrophes have Speical Obligations?" Business Ethics Quarterly. Vol. 16, No. 2. May 2006.
[11] Anderson, Sarah. "The Rise of Corporate Power." Institute for Policy Studies, 2000.
[12] "Our Mission and Spirit." http://www.gsk.ca/en/careers/mission_spirit/; Accessed: April 2007.
[13] Shaw, Bill; Post, Frederick. "A Moral Basis for Corporate Philanthropy." Vol. 2, No. 10. Journal of Business Ethics. October, 1993.

basis of a reciprocal obligation to contribute in kind.[14] Finally, empirical studies have made a business case for philanthropy, demonstrating the compatibility and potential synergies achieved in the alignment of social and economic objectives.[15]

Corporate Citizenship Programs: Initiatives for Global Access

In the following section, corporate social responsibility initiatives for global health access will be described in detail from a multitude of perspectives. Since most pharmaceutical companies engage in a plethora of small-scale partnerships or donate cash resources through a separate foundation, focus will be given solely to initiatives in which the company has invested substantially as a primary partner.

1. Pfizer (48,371m global revenues, US firm)

As the largest pharmaceutical company by global 2005 revenues, Pfizer has received many accolades for its social initiatives. Fortune magazine has ranked Pfizer among the top 100 companies in its annual global ranking of the most socially responsible companies, commending the company for making "environmental, social, and ethical considerations part of doing business". Likewise, Pfizer has appeared in multiple years of the Business Ethics 100 rankings. In comparison to the median contribution of 0.14% of revenues by Fortune 100 companies, Pfizer contributes 2.3%, nearly 16 times the average amount.

Table 2. Pfizer's Total Corporate Giving (2005)

	2005 Value	Change from 2004	Change from 2003	As % Profit	As % Revenue
Cash Contributions	70,554,302	-15.3%	-4.4%	0.5%	0.1%
In-Kind Contributions	1,161,906,114	92.7%	120.1%	8.3%	2.2%
Total Contributions	1,232,460,416	--	--	8.8%	2.3%

Source: Businessweek, 2006

Specific to its Global Access initiatives, Pfizer has contributed 98 million in cash and 1.2 billion in product donations for both the developing and developed worlds. In the company's core statement, Pfizer recognized the importance of working in partnership with national governments, international agencies, NGOs, multilateral organizations, and academic institutions in order to enhance access to drugs. In developing its corporate initiatives, Pfizer strongly believes that cash and product donations are insufficient in combating the structural problems of health care. Hence, many initiatives involve technical know-how transfer and healthcare infrastructure development. In the developing world, Pfizer concentrates on four main initiatives: A) Diflucan Partnership – Global HIV/AIDS Partnership; B) International Trachoma Initiative; C) Infectious Disease Institute.

[14] Wood, Donna; Logsdon, Jeanne. "Theorizing Business Citizenship." Perspectives on Corporate Citizenship. Andriof and McIntosh, Greenleaf Publishing, 2001.
[15] "Smarter Corporate Giving." BusinessWeek. November 2005.

A. Diflucan Partnership

Initiated in 2000, the Diflucan Partnership Program constitutes Pfizer's flagship campaign. Working in conjunction with the International Association of Physicians, Axios International Medical Assistance, the International Dispensary Association, and the Zimbabwe branch of the US Center for Disease Control, Pfizer has donated more than 4 million free doses of Diflucan and committed $110 million. As of April 2005, 20,000 healthcare professionals have been trained in partnership with the International Association of Physicians in AIDS care. Spanning 34 countries and 1,000 facilities, the Diflucan Partnership has treated 150,000 patients for two life-threatening opportunistic infections commonly associated with AIDS.[16]

Launched in 1992, Diflucan, a blockbuster drug used to treat cryptococcal meningitis and other fungal infections came off patent in 2004. With annual sales of $1.0 billion before patent expiration,[17] Diflucan, along with Zithromax, Norvasc, and Zoloft constituted 30% of Pfizer's 2001 sales.[18] By launching the initiative in 2000, Pfizer had already recovered the initial R&D investment in the drug, estimated at $700 million, and leveraged the remaining years of Diflucan's patent protected period to generate positive reputational benefits and improve access in impoverished nations with HIV/AIDS infection rates of 1% or more. Without Diflucan, the cryptococcal meningitis infection kills people with AIDS in two months, affecting approximately 10% of the 39.5 million people with HIV.[19]

Critics, however, challenge the Diflucan partnership for poor implementation and for diverting attention away from more comprehensive reforms. In Pfizer's 2004 Global Access Report, Hank McKinnell, Chief Executive, declared that there would be "no dollar or time limits" for the Diflucan Partnership, targeted at the world's 50 poorest countries. In response, the Director General of the World Health Organization commended the initiative as evidence that "the private sector is showing it is willing to do its part to fight the HIV/AIDS epidemic."[20] According to grassroots distributors, however, the Diflucan Partnership encountered implementation problems. A year after the launch of the Diflucan Partnership, Pfizer admitted that supplies failed to reach intended recipients in substantial numbers. Instead of running the scheme in-house, Pfizer sub-contracted administration to Axios International, which often led to delays in decision making and communication difficulties. Moreover, the country approval process dragged due to the slow evaluation protocol.[21]

More radical dissidents censured the initiative for diverting attention away from the company's underlying pricing policies. Despite donations to approved NGOs and government agencies, Pfizer maintained patent protection in many key countries and opposed generic fluconazole production. For example, Pfizer charged the South African government $4.15 per

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[16] "Diflucan Partnership Program." International Federation of Pharmaceutical Manufactures and Associations." http://www.ifpma.org/Health/hiv/health_diflucan_hiv.aspx; Accessed: April 2007.
[17] Sales halved, falling $445 million in the year Diflucan came off patent.
[18] Fischer, Jeff. "Pfizer's Flat Four Years." The Motley Fool. June, 2002.
[19] "Complete Report: UNAIDS/WHO Epidemic Update." UNAIDS. http://www.unaids.org/ December 2006.
[20] "A Prescription for Access." Pfizer, 2004.
[21] "In the time it takes you to read this article Pfizer will make $250,000. So does it have a duty to provide cheap drugs to the poor?" The Guardian. April, 2003. http://www.guardian.co.uk/medicine/story/0,11381,942402,00.html

Diflucan pill under the reduced price regime, while in Thailand, where Pfizer did not maintain a patent, the drug cost only $0.29. In Kenya, where Pfizer maintained exclusive rights, the drug cost $18, even more expensive than US prices.[22] As a result, critics such as Paul Zeitz of the Global AIDS Alliance have issued statements arguing that drug donation problems do not present a sustainable solution because they "implement cumbersome enrolment and eligibility criteria, protect the patent system, and allow the company tax write-offs and good public relations", despite "never solving the underlying problem."[23]

B. International Trachoma Initiative

Trachoma, a bacterial infection of the upper eyelid, is the world's leading cause of preventable blindness. Currently, 6 million people worldwide suffer blindness due to the disease and another 150 million have the infection. Overall, 10% of the world's population, mainly concentrated in Africa, Asia, the Middle East, and parts of South America and Australia, remain at risk of blindness, with women especially vulnerable.[24] In order to combat this debilitating disease, Pfizer and the Edna McConnell Clark Foundation formed the International Trachoma Initiative (ITI) in 1998 with the goal of fulfilling the WHO's goal of eliminating trachoma by 2020.

As an initiative, ITI meets the criteria of transparency and accountability with socially-audited annual reports and well-documented health impacts. By 2004, the initiative reduced incidence of the disease in children under 10 by 90% in Morocco and accomplished a 75% reduction of overall disease incidence in Vietnam and Tanzania.[25] In 2006, trachoma was completely eliminated from Morocco, prompting ITI to expand the program to a total of 12 countries.[26] Through 85,000 eye-sight preserving surgeries, 10 million treatments of Zithromax donated by Pfizer (worth $225 million), 9.5 million at-risk people reached through health education, 23 applied research grants totaling $2.7 million, and 135 million Zithromax treatments committed for the future[27], ITI has been commended by health practitioners for its potency in reaching the WHO goal of eliminating trachoma by 2020. The success of the initiative can be largely attributed to the clarity of roles in the public-private partnership and the efficacy of the four-pronged SAFE approach.[28]

The history of the partnership highlights essential components that have led to the initiative's success. From 1974 until the end of 1998, the Edna McConnell Clark Foundation devoted more than $90 million to research potential drugs to control debilitating tropical diseases. Of the $90 million spent over 25 years, $28.1 million focused solely on trachoma research, with

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[22] "Pfizer and AIDS." Corporate Watch. http://www.corporatewatch.org/?lid=330 Accessed: April 2007.
[23] *Ibid – Note 21*.
[24] "Water-related diseases: Trachoma" World Health Organization. Accessed: April 2007
[25] "A Prescription for Access." Pfizer, 2004.
[26] "Morocco reaches major milestone in fight against trachoma." World Health Organization. December 2006. Current ITI operations are carried out in: Ethiopia, Ghana, Kenya, Mali, Mauritania, Morocco, Nepal, Niger, Senegal, Sudan, Tanzania, and Vietnam.
[27] "Annual Report: 2005." International Trachoma Initiative. http://www.trachoma.org/publications.php#
[28] SAFE is comprised of (1) Surgery – a 15 minute procedure that trained nurses can perform in the field to treat advanced-stage disease; (2) Antibiotics – provision of Zithromax to treat active infections; (3) Face Washing – reduction of disease transmission; (4) Environmental change – improvement of communitywide sanitation.

$9.6 million dedicated to immunology and vaccine development and the balance of $18.5 million on epidemiology and risk factor studies to improve methods of controlling and eliminating trachoma. In 1992, the Foundation learned that Pfizer's long acting macrolide antibiotic, azithromycin effectively treated the genovars of *C.trachomatis*, responsible for sexually transmitted infection. Early identification of the positive lab result prompted the Foundation to contact Pfizer in launching clinical trials against trachoma in a community setting in Saudi Arabia and Gambia. Renewed by positive lab results, the Edna McConnell Clark Foundation and Pfizer formed ITI, garnering financial support from groups such as the Department for International Development of the United Kingdom, the Bill and Melinda Gates Foundation, Conrad Hilton Foundation, Starr Foundation, Izumi Foundation, the Dibner Fund, the Lavelle Fund for the Blind, and the Rockefeller Foundation.[29] Overall, the early research contribution of the Edna McConnell Clark Foundation and the targeted partnership with Pfizer provided the grounds of a credible, long-lasting partnership with clear distribution mechanisms and a long-term commitment to working with government officials.

As a long-lasting oral antibiotic, Zithromax needs to be ingested only once under the SAFE regime to prevent future infection – a major factor in the sustainability of Pfizer's donation in contrast to the Diflucan partnership. In 2005, although Zithromax came off patent, Pfizer continued to be the sole supplier. Key government officials and international donors have commended the ingenuity of the SAFE program, calling the initiative a "powerful partnership of private and public resources" that focuses on both curative and environmental changes.

C. Infectious Disease Institute

In Kampala, Uganda, Pfizer parnered with Makerere University, international infectious disease experts, the Ugandan government, and non governmental organizations to design and build the Infectious Diseases Institute (IDI), aimed at training African doctors in the prevention and treatment of HIV/AIDS as a means to strengthen local capacity in HIV/AIDS care. As of the end of 2006, the IDI has trained more than 650 healthcare providers from 21 African countries, reaching an estimated 1,500 local African caregivers trained by program graduates and 50,000 patients benefiting from health professional training.[30] Along with a global partnership of infectious disease experts, the Academic Alliance for AIDS Care and Prevention and non-governmental organizations such as the San Francisco AIDS Foundation, the Infectious Diseases Society of America and The AIDS Support Organization (TASO) in Uganda, Pfizer has supported technology transfer programs and research efforts to develop new approaches to address the HIV/AIDS epidemic. The IDI provides the following services: 1) enhanced HIV care, including anti-retrovirals and prophylaxis for opportunistic infections; 2) Education and training for African physicians and health care providers; 3) A state-of-the-art diagnostic laboratory to monitor HIV therapy and to support diagnosis of opportunistic infections, tropical diseases and sexually-transmitted diseases; 4) Clinical research to identify the best approaches for patient care, including directly observed therapy and once-a-day treatment regimens[31]

[29] Cook, Joseph. "The founding of the International Trachoma Initiative and the challenges ahead in drug donations for the elimination of blinding trachoma." Presented to the Organisation Internationale Pour La Lutte Contre Le Trachome Annual General Assembly. May 2003.
[30] "A Prescription for Access." Pfizer, 2004.
[31] "Pioneering AIDS Medical Facility for Africa." Pfizer, 2007.

Overall, Pfizer committed $35 million to the establishment of the IDI, pledging a total of $19 million to support the program to 2010, when the IDI is expected to settle and broaden its funding base. In scale, the initiative remains modest, but through the accompanying Global Health Fellows program, the exchange of scientists and technical know-how potentially provides a sustainable solution to aid the development of grassroots health infrastructure and to strengthen the local health provider network. Nevertheless, only 18 Pfizer scientists participated in this global exchange in 2003 – a very humble achievement in a company that employed approximately 115,000 people at the time.[32] To date, only 90 fellows have been deployed, including Pfizer physicians, nurses, epidemiologists, laboratory technicians, marketing managers, financial administrators, and health educators.[33] Although human capital constitutes a core competency of Pfizer, the scalability and overall impact of such an initiative remains dubious at best, especially since each rotation lasts a short six months.

2. GlaxoSmithKline (46,089m global revenues, British firm)

Highly regarded by the popular press for its corporate social responsibility commitments, GlaxoSmithKline (GSK) received the 2006 World Business Award from the International Chamber of Commerce and the United Nations Development Program for its lymphatic filariasis elimination program. Among many other accolades, the Committee Encouraging Corporate Philanthropy (CECP) awarded Pfizer the Excellence in Corporate Philanthropy Award.[34] In 2006, the UK's Guardian Giving List, which orders FTSE 100 companies by the percentage of pre-tax profits contributed to charitable causes, listed GSK as the sixth largest contributor. For the fifth year in the row, GSK earned the title of the largest overall giver in the value of donations.[35]

Table 3. UK Guardian Top 10 Givers (2006)

FTSE 100 give 0.79%

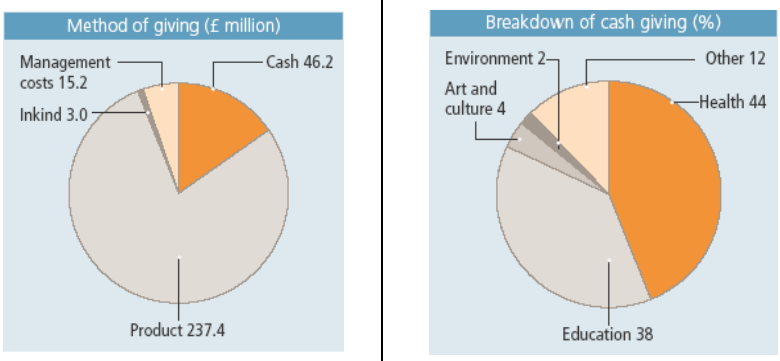
Company	% of pre tax profit	Cash donation £m	Staff time £m	Gifts in kind £m	Manage-ment costs £m	Totals £m	Reported via	Year end
1(5) Sainsbury	7.02	14.86	-	3.40	0.45	18.73	lbg	25.03.06
2 (2) ITV PLC	6.20	1.22	0.86	17.50	0.48	19.27	%	01.12.05
3 (2) Northern Rock	5.02	24.78	0.14	0.00	-	24.80	lbg	31.12.05
4 (4) WPP Group	2.92	3.40	13.90	-	-	17.30	%	31.12.05
5 (-) ICAP	2.69	5.20				5.20		31.03.06
6 (10) GlaxoSmithKline	2.10	61.00	-	59.20	21.00	141.20	lbg	31.12.05
6 (-) Kazakhmys	1.87	2.12	-	-	-	2.12		31.12.05
8 (22) Tesco	1.87	34.08	6.70	0.62	0.36	41.77	lbg	20.02.06
9 (23) Smith & Nephew	1.83	0.41	-	0.23	-	0.64	%	01.01.06
10 (9) Unilever	1.66	28.17	1.80	21.02	-	53.81	lbg	31.12.05

Source: Guardian, 2006

[32] "A Prescription for Access." Pfizer, 2004.
[33] "Global Health Fellows." Pfizer, 2007.
[34] "Our Work with Communities." GSK Corporate Social Responsibility Report 2006.
[35] Armstrong, Murray. "FTSE 100 Giving Drops to 0.8%." The Guardian. November 2006.

In regards to global health access initiatives, GSK primarily invests in its R&D program and maintains a tiered preferential pricing and voluntary licensing program to favor low and middle-income countries. These policies will be later discussed, analyzed, and compared in the industry review section. In terms of community-investment initiatives, GSK donated £302 million ($558 million) in 2006, equivalent to 3.9% of pre-tax profits[36] and approximately four times the Fortune 100 median. In 2005, GSK donations were valued at £380 million ($691 million), equivalent to 5.6% of profits. The decline in financial commitment has been attributed to an overall contraction in the pharmaceutical industry due to a weak short-term pipeline outlook, slowing global demand, pending patent expirations, and legal pressures.[37] In comparison to Pfizer and Novartis, GSK provides a clearer cost summary of product and cash donations. Nevertheless, despite the availability of financial statistics, the lack of standardization in time frame prevents cross-program or time-series comparison. For example, figures range from aggregate contributions over project duration and projected future commitments instead of an exact annual contribution. Overall, such a reporting method reduces transparency and hinders fair assessments of corporate contributions. The following charts enumerate the breakdown of expenditures:

Chart 4. Value of Community Investment (2006



Source: GSK, 2006

In defining the primary motivation for its community investment projects, GSK asserts that such initiatives are not intended to create commercial markets, rather, to demonstrate commitment to tackling healthcare and education challenges, improve employee morale and loyalty, and enhance corporate reputation with stakeholders. Overall, GSK seeks to create self-sustaining projects capable of providing a long-term benefit once funding ceases. GSK has identified five major areas of concentration in the developing world: A) Global Alliance to Eliminate Lymphatic Filariasis (LF); B) Positive Action (HIV/AIDS prevention and treatment); C) Mobilizing for Malaria; D) PHASE (diarrhea-related disease prevention); E) Essential antibiotic and other product donations in response to humanitarian disasters and to support basic health care provision. GSK program cost summaries of developing world community investment

[36] *Ibid*.
[37] "Industry Surveys: Healthcare [Pharmaceuticals]." Standard and Poor's. November, 2006.

initiatives are reflected below, clearly modest contributions. The first three initiatives will be described in detail below.

Table 5. GSK Community Investment Cost Summaries (2006)

	2006 Product donations (millions)	2006 Product donation value (millions)	2006 Cash grants (millions)	Cummulative product donations over project lifetime (millions)	Cummulative cash investment
Global Alliance to Eliminate LF	155	29	1.9	600	--
Positive Action (AIDS/HIV)	--	--	1.9 (Africa)*	--	--
Mobilizing for Malaria	--	--	--	--	1.7 (since 2003)
PHASE	--	--	--	--	3.1 (since 1998)
Antibiotics and Essential Drug	--	41	--	--	--

*Although GSK has programs in Asia and Mexico, no financial contributions are listed. 1.9 million has been committed over 3 years.
** Community initiatives in the developed world have been excluded (mainly initiatives in the UK, US, and Western Europe)

Source: GSK, 2006

A. Global Alliance to Eliminate Lymphatic Filariasis

As GSK's primary initiative, the Global Alliance was formed in 2000 with the purpose of providing fundraising, advocacy, communications, and technical assistance in support of the elimination of LF as a public health problem by 2020 and the alleviation of physical, social, and economic hardship in individuals with LF-induced disabilities.[38] As a founding member in conjunction with the World Bank, the WHO, numerous National Ministries of Health, and various NGOs, GSK has donated over 600 million albendazole treatments to halt disease transmission in 34 countries.[39] Later, Merck joined the Global Alliance by expanding its Mectizan program, coordinating with GSK to develop a harmonized approach for drug requests from sub-Saharan African countries. To meet demand, in 2005, GSK opened a $3 million facility in Cape Town to manufacture tablets exclusively for donation – the largest project of its kind.[40] Currently, the Global Alliance has expanded to include over 40 organizations from public and private sectors, spanning academia, government bodies, and NGOs.

LF, also known as Elephantiasis, jeopardizes the health of more than a billion people in 80 countries, notably in Africa, South Asia, the Pacific, and the Americans. Over 120 million have suffered from the disfiguring disease and 40 million are seriously incapacitated.[41] To treat the disease, three different drug possibilities exist: 1) DEC – developed over 50 years ago, this anti-filarial drug provides an inexpensive and effective treatment. DEC, however, cannot be used in most of Africa due to severe side reactions in conjunction with other infections, such as onchocerciasis (river blindness). 2) Mectizan – an oral anti-parasitic drug developed by Merck effective against both onchocerciasis and LF, Mectizan is provided free of charge for the treatment of onchocerciasis in all endemic countries and for LF in African countries where onchocerciasis and LF co-exist. 3) Albendazole – a drug commercialized by GSK over 20 years

[38] "Global Alliance History." Global Alliance. http://www.filariasis.org/resources/globalalliancehistory.htm Accessed: April 2007
[39] "Eliminating Lymphatic Filariasis." GSK, 2007.
[40] "Consigning Lymphatic Filariasis." GSK, 2004.
[41] "Lymphatic Filariasis." World Health Organization. September 2000.

ago, albendazole provides a well-established anti-parasitic treatment, given to an estimated 500-800 million people, mostly children, for intestinal infections.[42] Just like ivermectin, albendazole was originally targeted as a de-worming agent for the veterinary market before human use. Due to the nature of the drug, however, albendazole has to be used in conjunction with either DEC or ivermectin.[43]

In comparison, Pfizer's overall monetary and product contribution through its Diflucan Partnership and International Trachoma Initiative dwarfs the value of GSK's LF donations. Moreover, Pfizer played a more active role in the determination of priorities and the structural design of the program. The positive effect of the LF campaign, however, stems from the recognition that although drug donations constitute a vital part of combating the disease, more fundamental environmental and sanitation reforms ought to be carried out simultaneously to prevent future cases. Due to the cooperation of National Ministries of Health of more than 80 countries and major supranational institutions, the Global Alliance effectively prioritizes public health concerns, calling upon GSK to supplement the proposed country-specific plans.[44] Overall, the alliance has created powerful reputational value for GSK through association with leading health care institutions and governmental agencies.

Critics, however, challenge GSK's use of the initiative and partnership with major government agencies and supranational institutions as a meant to divert attention away from more fundamental patent and pricing reforms on life-savings drugs. Others challenge that the LF donations come at the expense of allocating more resources to scaling-up the company's internal Tropical Diseases Unit. Both of these concerns will be discussed in the industry-review section.[45]

B. Positive Action (HIV/AIDS prevention and treatment)

Founded in 1992, the Positive Action program aims to strengthen the capacity of community organizations providing HIV and AIDS prevention, education, and healthcare services through a series of decentralized projects. In 2006, GSK supported 19 different program operations in 17 countries.[46] Since inception, Positive Action has funded 43 projects in partnership with 37 different community-based organizations (CBOs) and NGOs.[47] In conglomerate, the program has enabled the following achievements:[48]

- **8,000** community and healthcare workers to be trained in East Africa
- **40,000** community delegates to participate at regional and international conferences
- **70** clinics in Kenya to develop their community links to improve ARV provision
- **8,500** healthcare professionals in 173 countries to have access to HIV/AIDS training toolkits
- **100** policemen in central Mexico to receive human rights training
- Prevention messages for **3** million women and family members in rural India by 2008

[42] "How can we prevent/eliminate LF?" Global Alliance. Accessed: April 2007
[43] "80 Million People Now Treated to Prevent Elephantiasis." GSK. March 2004.
[44] Barrett, Laura. "Measuring the Impact of the Global Program to Eliminate Lymphatic Filariasis on Health Systems in Endemic Countries: Creating a Tool and Methodology." Purdue University.
[45] "Dare to Lead: Public Health and Private Wealth." Oxfam. February, 2001.
[46] "Our Work with Communities." GSK Corporate Social Responsibility Report 2006.
[47] "Positive Action: Working with Communities Affected by HIV/AIDS." GSK. May 2006.
[48] "Positive Action Program." GSK. http://www.gsk.com/community/positiveaction/index.htm Accessed: April 2007.

Unfortunately, GSK does not make specific project details available or the company's overall financial and resource commitment. For the most part, corporate contributions consist of cash grants and marketing aid to established CBOs with no mention of product donations.[49] By providing relatively small cash grants to local health practitioners, GSK has claimed the differential benefit without clearly delineating the company's exact contribution. In the 2006 Corporate Community Investment Report, the only hard financial commitment defined was a $1.9 million cash grant over three years to general healthcare clinics in Africa.[50] In regards to the nature of the donation, GSK has the principal objectives of enabling patients to "avoid the stigma of visiting a dedicated HIV clinic" and of helping doctors to provide "ongoing services to people diagnosed with HIV"[51] – both ambitious and nebulous goals.

Unsurprisingly, the initiative has been criticized for its insufficient dedication of resources and uncertain concrete social impact. In light of GSK's controversial decision in 2000 to challenge Cipla's Duovir exports– a generic version of the patented Combivir, a vital treatment of HIV/AIDS – various NGOs consider the Positive Action program a poor substitute for more comprehensive reforms. Patented in October 1996, Combivir benefits from a 20 year patent-protected period under TRIPS until 2016, bringing in an operating profit of approximately $245 million annually. In perspective, this amount supersedes total health expenditures by members of the African Regional Industrial Property Organization (ARIPO), which includes some of the poorest countries with the highest incidence of infection, by $89 million.[52] Although global sales on Combivir have comfortably exceeded $1.5 billion, thereby clearly recouping the initial $500 million investment, GSK's decision to challenge the Cipla Corporation deviates sharply from the objectives of Positive Action. As a price comparison, Cipla sells an annual supply of Duovir for $292, while GSK charges $927 in Africa. Moreover, GSK's three-drug combination Trizivir costs $1,602 in Malawi, where per capita GNP hovers at a dismal $190, versus Cipla's comparable Triomune for $304.[53] Likewise, GSK's Lamivudine is on average 20% more expensive in Africa than in 10 advanced industrialized countries in Western Europe as a result of differential negotiation positions.[54] In regards to safety and efficacy comparability, the WHO has endorsed the quality of Cipla's generic drugs.

C. Mobilizing for Malaria (series of public-private partnerships)

Through the African Malaria Partnership, GSK has supported education and behavior changes in eight different African countries, through partnerships with NGOs such as Freedom from Hunger, the African Medical and Research Foundation (AMREF), and Plan International. Since 2003, GSK has invested $1.7 million, targeting approximately 2 million people. GSK, however, plans to discontinue funding of these initiatives, but claims that project support will have a long-term positive impact.[55] Unfortunately, no social audit or performance review of the partnership initiatives is available.

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[49] "Positive Action: Working with Communities Affected by HIV/AIDS." GSK. May 2006.
[50] "Our Work with Communities." GSK Corporate Social Responsibility Report 2006.
[51] *Ibid*.
[52] "Dare to Lead: Public Health and Private Wealth." Oxfam. February, 2001.
[53] Bosely, Sarah. "Jean Pierre Garnier, head of Glaxo" The Guardian. 2003
[54] *Ibid*.
[55] "Our Work with Communities." GSK Corporate Social Responsibility Report 2006.

After dropping the African Malaria Partnership, GSK committed a $1.7 million grant over three years to support Mobilizing for Malaria, an advocacy initiative to generate greater awareness, political commitment, and sustained funding, brining together activities, NGOs, the media, governments, and academic communities.[56] The real contribution of GSK to fighting against malaria, however, extends beyond both of these two partnerships into the area of R&D for vaccines and effective treatment. Since 1983, the precedent companies to GSK had experimented with creating a potential malaria vaccine. In 2001, GSK joined with the Malaria Vaccine Initiative at PATH to fast-track development and testing of the only malaria vaccine candidate with established potential effectiveness.[57] Under the MVI-GSK agreement, clinical trials of the vaccine in children between six and twelve took place in Gambia and Mozambique with promising results published in the *Lancet* in 2005.[58]

Moreover, GSK owns a portfolio of promising anti-malarial drugs – commercialization decisions, however, differ dramatically. As a historical background, both GlaxoWellcome (GW) and SmithKline Beckman (SB) engaged in malaria research prior to the merger in 2000. Post-merger, GSK inherited the anti-malarial drug Malarone, a combination therapy of atovaquone and proguanil, and the SB Chlorproguanil/dapsone combination, LapDap, undertaken by the Tropical Diseases Unit. Funded by SB, the WHO, and the UK Government's Department for International Development, LapDap received approval from the UK Regulatory Agency in July 2003, and has been adopted by over 20 African countries at not-for-profit preferential prices.[59] More importantly, LapDap has emerged on the market without IP protection, providing a cheap and effective treatment at an average price of $0.50.[60]

GSK's commercialization choice for Malarone, however, dramatically diverges from that of LapDap. In 1999, GW began a pilot program in Kenya and Uganda to assess the feasibility and sustainability of a Malarone Donation program, contingent on the case when first and second-line anti-malarials fail.[61] With a striking 98% success rate in the treatment of uncomplicated malaria, Malarone, as one of the few new and safe drugs, has been carefully safeguarded from misuse that would spur resistance.[62] Due to this complication, the Malarone Donation program currently remains in the testing phase in order to determine a successful protocol for treatment. In the recent 2006 report, no mention was made of the progress of the pilot initiative. As a result of its potency, Malarone costs a significant premium over standard drugs, making it the most expensive anti-malarial in a limited portfolio of drugs. At the deeply discounted preferential price for LDCs, each treatment of Malarone still costs $19.20 (versus

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[56] *Ibid*.
[57] "Malaria Vaccine Initiative." http://www.malariavaccine.org/ Accessed: April 2007
[58] Semir, Marc. "Pubic-private partnership leads to scientific breakthrough in vaccine development." Malaria Vaccine Initiative. October 2004.
[59] "LAPDAP© Antimalarial Drug Development." IFPMRA. http://www.ifpma.org/Health/malaria/health_lapdap_mal.aspx. Accessed: April 2007
[60] "Dare to Lead: Public Health and Private Wealth." Oxfam. February, 2001.
[61] "Community Initiatives: Annual Report 2000." GSK, 2000. http://www.gsk.com/financial/reports/ar/report/descrip_of_bus/comm_partner/com_partner.html
[62] "New Candidates in Development: Malaria." World Health Organization, 2000.

$52.9l in the US) – still a substantial 38 times more expensive than LapDap.[63] Moreover, GSK has retained patent protection on Malarone, recognizing the unique profit potential as one of very few third-line drugs.

To date, the Mobilizing for Malaria advocacy campaign has not attempted to link in product donations of Malarone or LapDap, which are accounted for under general product and basic health donations. Given the potential pitfalls of donation programs in cultivating dependency, GSK attempted to separate product donations from community investment initiatives, unless in cases of clear role definition and the presence of an environmental change component, as in the case of the LF Global Alliance. Nevertheless, separating product donations from the initiative itself, as in the case of the Positive Action, fails to leverage company core competencies and invites criticism of insufficient commitment. Logically, finding the golden balance between these two opposing forces manifests the difficulties of the pharmaceutical industry in defining a cogent and potent corporate social responsibility initiative that effectively manages the competing stakeholder claims of developing world citizens and shareholders.

3. Novartis (36,031m global revenues, Swiss firm)

Based in Basel, Switzerland and founded in 1996 through the merger of Ciba-Geigy and Sandoz, a leading generic producer, Novartis represents the only company with leadership positions in both patented and generic pharmaceuticals. Ranked by IMS Health as one of the fastest-growing global pharmaceutical companies worldwide in recent years, Novartis has declared its mission to "discover, develop and successfully market innovative products to prevent and cure diseases, to ease suffering and to enhance the quality of life."[64] The figure below enumerates the revenue contribution of each of the Novartis divisions, illustrating the relative importance of the patented pharmaceuticals business relative to Sandoz and Consumer Health businesses.

Table 5. Novartis Annual Financial Highlights (2006)

	2005		2004		% Change	
	USD m	% of net sales	USD m	% of net sales	USD	Lc
Net sales	**32 212**		28 247		14	13
Pharmaceuticals	***20 262***		***18 497***		***10***	***9***
Sandoz	***4 694***		***3 045***		***54***	***54***
Consumer Health	***7 256***		***6 705***		***8***	***8***
Operating income	**6 905**	21.4	6 289 (1)	22.3	10	
Net income	**6 141**	19.1	5 601 (1)	19.8	10	
Basic earnings per share/ADS	**USD 2.63**		USD 2.37 (1)		11	

Source: Novartis, 2006

[63] Nwanma, Vincent. "Africa Puts Fight Against AIDS at Forefront." Africa Recovery. June 2001.
[64] "Our Mission." Novartis. http://www.novartis.com/about-novartis/our-mission/index.shtml. Accessed: April 2007

In regards to corporate citizenship, Novartis was named 2006 Super Sector Leader in healthcare by the Dow Jones Sustainability Index and ranked No. 2 in the healthcare sector in the 2006 edition of Barron's "World's 100 Most Respected Companies" and No. 23 across all industries. In designing global access initiatives, Novartis recognizes the complexity of the global health dilemma, calling upon governments to play a principal role in developing sufficient healthcare infrastructure, distribution, and financing to facilitate private sector programs. Moreover, Novartis affirms the importance of a preferential pricing system, but stresses the importance of safeguards to prevent re-exports. In regards to patent policies, Novartis states that the "pharmaceutical industry cannot play a meaningful role in expanding access to medicines in poor countries without IP assurance" as a means to protect a company's substantial investment and mitigate R&D failure risk. The heightened sensitivity over the issue of IP protection in the developing world responds to the recent criticism Novartis has received for suing the government of India to overturn key parts of the 2005 Indian patent law which permitted Cipla's manufacturing of a generic version of the cancer drug Glivec.[65] Although Novartis initially lost the case when the Office of the Controller General of Patents Design and Trademarks refused to recognize Glivec, an appeal decision has been filed with the newly-operational Intellectual Property Appellate Board. Interestingly, Novartis's defense of its IP stance appears as a central section in its 2005 Corporate Citizenship Report, dwarfing the global access section in comprehensiveness and size.[66] In fact, the corporate reporting on the subject is exceptional, demonstrating Novartis' potential prowess of social and financial impact assessment, if incentivized.

In comparison to other major industry players, Novartis is less transparent in systematically reporting financial contributions and overall health impact. In totality, Novartis social responsibility programs reached over 33 million patients in 2006 valued at USD 755 million. Due to the lack of a systematic breakdown of this aggregate figure by cash grants versus in-kind donations by program, there is no meaningful method to quantify this figure relative to financial metrics. Overall, Novartis maintains three main global access initiatives in conjunction with the WHO and the Novartis Foundation for Sustainable Development: A) Leprosy Program; B) Coartem Program (Malaria); C) Tuberculosis Product Donations.

A. Novartis Foundation for Sustainable Development – Leprosy Program

Having developed two of the three drugs in the multidrug treatment (MDT) regime for leprosy, Novartis began its first leprosy initiative in 1988 in Sri Lanka and Indonesia, extending to other countries throughout the 1990s. Exhibit 2 (Appendix) provides a more detailed summary of country-specific Novartis Foundation operations. Since 2000, however, the Novartis Foundation has provided MDT for all leprosy patients worldwide through a public-private partnership with the World Health Organization after signing a Memorandum of Understanding. By WHO estimates, Novartis's MDT donation since 2000 has led to the cure of about 4 million patients.[67] In light of the success of the program, the Novartis Foundation recently extended its drug commitments to 2010.

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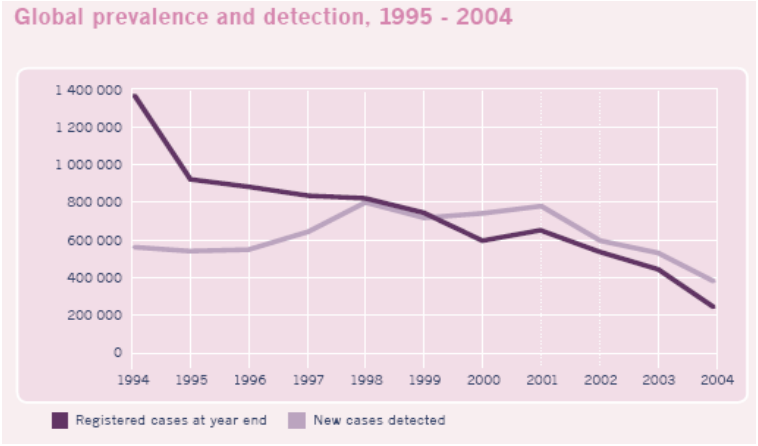
[65] Tremblay, Jean. "Novartis Loses India Patent Case." Chemical & Engineering News. February 2006.
[66] http://www.novartis.com/about-novartis/corporate-citizenship/india-glivec-patent-case/index.shtml - Novartis has created a special section in its corporate citizenship report dedicated to tracking and defending its position.
[67] "Improving Access to Leprosy Treatment." Novartis Foundation for Sustainable Development, 2005.

As a history of the WHO partnership, prior to the 1991 World Health Assembly resolution committed to the eradication of leprosy, supply of MDT had been sporadic, typically in the form of loose drugs rather than the more expensive, yet effective blisterpack. Through an initial partnership with the Nippon Foundation and from 2000 onwards with the Novartis Foundation, the WHO has supplied MDT free of charge to all endemic countries. Overall, the sustained WHO partnership has profoundly decreased the incidence of leprosy in the world. In the past two decades, the prevalence rate of the disease has dropped by 90% with disease elimination from 113 out of 122 countries where leprosy was considered a public health problem min 1985. Since the Novartis partnership in 2000, an additional 13 countries have achieved this milestone due to the widespread availability of MDT. Overall, since 2001, new cases detected globally have dropped 20% annually. At the end of 2004, the global disease burden decreased to 286,000 cases – a stark contrast from the 5.2 million in 1985 and 753,000 at the end of 1999.[68] The following charts summarize the social impact of the WHO-Novartis partnership.

Table 5. Social Impact of WHO-Novartis Partnership



	Cases on treatment on January 1st				New cases detected in the year			
	2000		2005		1999		2004	
	Number	Rate (per 10 000)	Number	Rate (per 10 000)	Number	Rate (per 100 000)	Number	Rate (per 100 000)
India	495 073	5	148 910	1.4	537 956	54.3	260 063	23.9
Brazil	78 068	4.3	30 693	1.7	41 236	25.1	49 384	26.9
Indonesia	23 156	1.1	19 793	0.9	17 477	8.3	16 549	7.5
DR Congo	5 031	1	10 530	1.9	4 221	8.6	11 781	21.1
Ethiopia	7 764	1.3	5 364	0.7	4 457	7.4	4 787	6.3
UR Tanzania	4 785	1.5	4 777	1.3	5 101	16.2	5 190	13.8
Nepal	13 572	5.7	4 699	1.8	18 693	78.1	6 958	26.2
Mozambique	7 403	3.9	4 692	2.4	5 488	28.7	4 266	22
Madagascar	7 865	4.7	4 610	2.5	8 704	51.6	3 710	20.5
Myanmar	28 404	5.9	2 708	0.5	29 765	61.8	3 748	7.5
Angola	3075	2.5	2496	1.6	1840	14.9	2109	13.6
Guinea	1 559	2	914	1	2 475	32	1 097	11.1
CAR	549	1.5	438	1.1	422	11.8	402	10.1

Source: WHO, Novartis, 2005

[68] "Leprosy" World Health Organization. http://www.who.int/mediacentre/factsheets/fs101/en/ October 2005.

Pioneering the social marketing approach to guide target audience needs and perceptions, the Novartis Foundation enhanced the efficacy and reach of the initiative by changing attitudes/social stigma and increasing case detection. For example, mass media campaigns initiated in February 1990 in Sri Lanka increased case detection by over 150% in less than a year. Furthermore, self-reported cases increased from only 9% in 1990 to 50% by 2001, enabling treatment to over 20,000 patients.[69] In areas of particular need, such as India, Novartis developed a Comprehensive Leprosy Care Program (CLCP) to provide standardized disability care and increase outreach, including economic rehabilitation, reconstructive surgery for functional improvement, provision of special footwear and physical aids, and instruction in physiotherapy exercises. Moreover, by monitoring results and conducting social impact studies, the Novartis Foundation has tracked the overall success of the initiative, learning from past mistakes and adjusting strategies to enhance the delivery of care. As nearly the sole provider of MDT in the developing world, Novartis's participation in the program reflects a high level of accountability and ownership.

B. Provision of Coartem, oral fixed-combination anti-malarial product

Building upon the success of the Leprosy partnership, the Novartis Foundation recently signed another Memorandum of Understanding with the WHO in regards to the provision of Coartem, an oral fixed-combination anti-malarial drug on September 29, 2006. With cure rates of up to 95%, Coartem is the only approved fixed-dose combination therapy for malaria. In contrast, however, Coartem will be provided at cost, though deeply discounted. Agreeing to reduce cost per treatment by 36%, the average cost will be $1. As for children under age of 5, Novartis reduced treatment costs by 50% to 45 cents per child, thus theoretically doubling access. To meet expected demand, Novartis undertook an aggressive manufacturing scale-up in New York and China to increase supply by 2,400% to 100 million treatments in 2006 – a stark contrast to only 4 million in 2004.[70] Due to poor health infrastructure in endemic countries, however, analysts expect the number of doses sold to fall below orders.

Given the youth of the partnership, not enough data exists to fully quantify the overall financial contribution and social impact of the program. Since malaria affects 300 million people globally and results in more than a million deaths, the potential scale of the Coartem initiative dwarfs that of the Leprosy partnership, which targets a disease already in decline. Moreover, 40% of the world's population remains at risk.[71] In Africa, malaria accounts for 40% of public health expenditure, 30-50% of inpatient admissions, and up to 50% of outpatient visits in areas of high malaria transmission.[72] The decision to charge a nominal fee for Coartem treatment thus stems from an argument for economic feasibility, especially since Novartis expects to lose 80 cents for each dose sold.[73] Consequently, the overall sustainability and social impact of the initiative remains a key concern, though the WHO agreement constitutes an important milestone

[69] "Improving Access to Leprosy Treatment." Novartis Foundation for Sustainable Development, 2005.
[70] Novartis announces initiative to improve access to state-of-the-art anti-malarial treatment Coartem." Novartis. September, 2006.
[71] "What is Malaria?" Roll Back Malaria. http://www.rbm.who.int/ Accessed: April 2007
[72] "Malaria in Africa." Roll Back Malaria. http://www.rbm.who.int/ Accessed: April 2007
[73] Bate, Roger. "Private Philanthropy: Still the Best Way to Stop Malaria and HIV." Medical Progress Today. June 2005. http://www.medicalprogresstoday.com/spotlight/spotlight_indarchive.php?id=821

in expanding access to this essential first-line drug. As a patented drug, Novartis maintains exclusive rights in the manufacturing and licensing decisions. [74]

C. Tuberculosis product donations – Global Fund Contribution

In December 2003, Novartis signed a Memorandum of Understanding with the WHO, committing itself to provide the WHO recommended TB treatment regime for half a million patients over five years.[75] Comprised of rifampicin-based fixed-dose combinations, Novartis will donate 100,000 DOTS treatments to Tanzania and Sri Lanka every year for five years as its contribution to the Global Fund – disbursed by the Global Drug Facility, hosted by the WHO, and operated by the Stop TB Partnership.[76]

Building upon the successful relationships developed through the Leprosy program, the Novartis Foundation for Sustainable Development aims to reduce stigma through social marketing and to encourage people to seek early treatment and comply fully. Given the extended treatment period and inherent difficulties with compliance given economic pressures, the Novartis Foundation will work closely with local health ministries to develop local context-specific initiatives to address challenges.[77]

Analysis of Industry Global Access Initiatives:

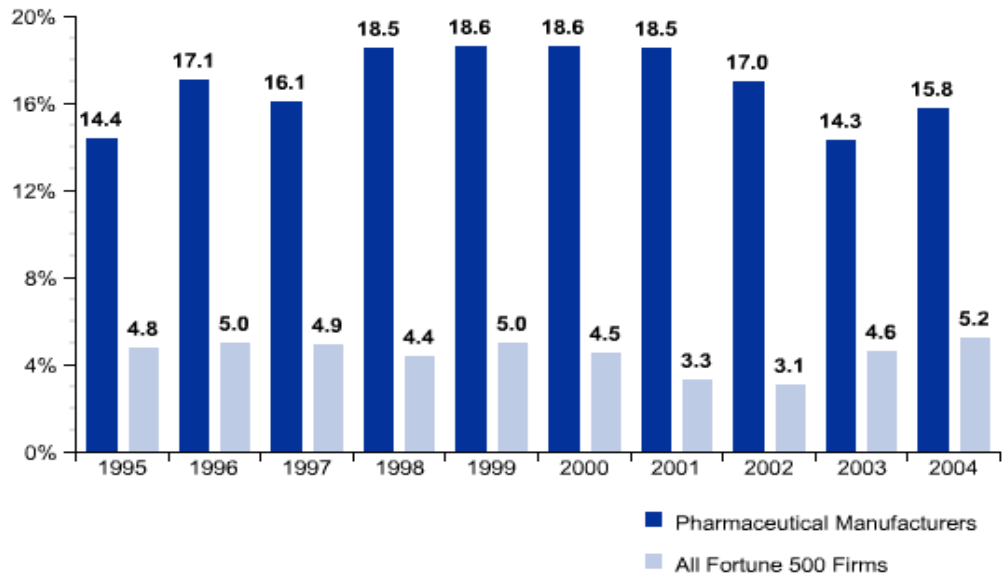
Industry Economic Structure

As one of the most profitable industry sectors, pharmaceutical companies face high fixed costs, but low marginal costs. With high barriers to entry, patent protection, a captive customer base, and capital-intensive research operations, large pharmaceutical companies have considerable market power. For every year from 1995 to 2002, the pharmaceutical sector led all industries in profitability. Since 2002, however, comparative profitability declined slightly, with drug companies ranking third in 2004, surpassed only by mining and crude-oil production. Nevertheless, pharmaceutical companies maintained profit margins three times higher than the median for all Fortune 500 companies (15.8% compared to 5.2%).[78] Given the high profit margins, proponents of increased corporate philanthropy and greater resource dedication to global health access argue that pharmaceutical companies have the financial means to sustain more generous pricing, patent, and R&D policies. Although many companies argue that stringent intellectual property standards preserve the incentive for R&D, many critics counter that there is

[74] Although Coartem is patented and Novartis maintains exclusive production, Professor Klaus Leisinger points that even though 95% of the drugs on the WHO's Essential Drug List are not patented, many sick people still cannot afford access due to poor health infrastructure and government decisions to spend four times on military purposes than on health care systems. In such a case, Leisinger warns that theoretical arguments of high drug prices and resource scarcity evade the fundamental issue of improving health care systems
"Great Tasks Need Grand Coalitions" Novartis Foundation:
http://www.novartisfoundation.com/en/publications/access/great_tasks_need_grand_coalitions.htm
[75] "Novartis TB DOTS Donation." IFPMA. http://www.ifpma.org/Health/Tub/health_novartisdots_tb.aspx
[76] "Half a million patients suffering from tuberculosis to get free life-saving medicines." WHO, 2003.
[77] "Tuberculosis – a curable disease which claims 2 million lives a year." Novartis, 2006.
[78] "Prescription Drug Trends: A Chartbook Update." Kaiser Family Foundation and Sonderegger Research Center. November 2005. http://www.kff.org/insurance/3161-index.cfm

no reason to believe that the predominant stimulus for innovation stems from such a high average industry profit level, especially in light of other high-innovation industries with significantly lower operating margins. Figure 6 and Exhibit 3 (Appendix) provide some key comparative financial highlights.

Figure 6. Median Pharmaceutical Industry Profitability



Source: Kaiser Foundation, 2005

According to a *Chronicle of Philanthropy* survey, pharmaceutical companies contribute 34 cents of every dollar donated to philanthropic causes by major US corporations. In addition, pharmaceutical companies took the top four rankings in US corporate charitable contributions.[79] The difficulty of determining the fair market value of product donations and R&D dedication further encumbers the evaluation of the sufficiency of industry-wide initiatives, especially since in-kind contributions on average constitute 70% of the corporate social responsibility portfolio and companies receive very generous tax breaks.[80]

The issue of access to medicines has emerged as an area of high reputational risk, threatening investor confidence and employee/scientist morale. For example, the decision of the pharmaceutical industry to pressure the South African government to enforce TRIPS despite the HIV/AIDS crisis prompted a lasting consumer and investor backlash that increased public awareness of issues surrounding prices and patents and encouraged developing countries to unite in demanding private sector concessions to public health. In the wake of public pressure, the pharmaceutical industry has acknowledged its role in the complex process of increasing access to medicines, thus stimulating a considerable increase in philanthropic programs, public-private partnerships, and R&D spending on HIV/AIDS, malaria, and tuberculosis since 1999. Overall, the five core areas of improving access in the developing world are as follows: 1) R&D for

[79] "Pharmaceutical Companies Lead the Way in Corporate Philanthropy." PhRMA. Fall, 2003.
[80] "Top 10 Corporate Philanthropy Findings." CECP, 2004.

developing world diseases, 2) preferential pricing systems, 3) intellectual property framework, and 4) public-private partnerships. In all cases, industry-wide coordination represents the first step in determining a fair social and economic framework. The following section will discuss the first two areas, focusing on specific initiatives spanning key industry players.

1. R&D Focus and Disease Coverage:

Nearly all leading pharmaceutical companies have dedicated some resources to neglected-disease R&D. The industry, however, lacks transparency in delineating overall funding commitment and pending pipeline projects dedicated solely to diseases of the developing world. According to industry analysts, 10% of global pharmaceutical R&D expenditures go towards diseases which account for 90% of the world's disease burden. With the absence of a profitable commercial market to recover R&D costs in a highly concentrated global market, pharmaceutical companies have often abandoned promising compounds in favor of dedicating resources to developing popular lifestyle drugs with high expected demand in the developed world. As a testament to the differential in market power, Latin America and Sub-Saharan Africa accounted for only 5.2% and 1% of global pharmaceutical sales in 2006.[81] Although pharmaceutical market growth has increased substantially in these developing countries, the purchasing power of the European and North American markets continue to dominate.

In 2001, total global R&D expenditure surpassed $70 billion with individual company expenditures spanning from $500 million to greater than $1 billion annually. Regrettably, less than 25% focused on infectious disease research.[82] Furthermore, according to the Tufts Center for the Study of Drug Development, the fully capitalized cost to develop a new drug, including post-approval studies, averaged $897 million in 2006.[83] With such large R&D budgets and governmental policies to expedite orphan drug and critical drug approvals, commitments to developing world disease R&D research appear dismally low in comparison.

Pfizer, GSK, and Novartis all have invested in R&D targeted at developing world diseases, usually in the form of a public-private partnership. Last October, Pfizer announced that it would grant access to its library of medicinal compounds – the world's largest – to the Special Program for Research and Training in Tropical Diseases, sponsored by the WHO.[84] Through information sharing and the training of scientists from developing countries in Pfizer's drug discovery laboratories, the company aims to speed the search for deadly parasitic diseases such as malaria, leishmaniasis, African trypanosomiasis, onchocerciasis, schistosomiasis and Chagas' disease. Under the arrangement, scientists in institutions affiliated with the Compound Evaluation Network screen compounds from the Pfizer library for potential potency.

The Novartis Institute for Tropical Diseases (NITD), a small-molecule drug discovery research institute, has dedicated 122 million for dengue and TB research in collaboration with

[81] Longwell, Lance. "IMS Health Reports Global Pharmaceutical Market Grew 7.0 Percent in 2006, to $643 Billion." IMS Health. March 2007.
[82] "Beyond Philanthropy: The Pharmaceutical Industry, CSR, and the Developing World." Oxfam, 2002.
[83] "Total Cost to Develop a New Prescription Drug, Including Cost of Post–Approval Research, is $897 Million." Tufts Center for the Study of Drug Development. May 2003.
[84] "Pfizer Assists World Health Organization In Search For New Treatments Against Diseases Of The Developing World." American Medical News. October 2006.

various scientific and academic communities.[85] Located in Singapore's biotechnology campus, Biopolis, NITD has a not-for-profit mission with a total staff of about 100 scientists.

Similarly, GSK collaborates with several private-public partnerships, including the Medicines for Malaria Venture, the TB Alliance, Aeras, MVI, and the International AIDS Vaccine Initiative. Moreover, GSK supports a division dedicated to diseases of the developing world (DDW) at the Tres Cantos R&D site in Spain, involving a staff of 100 scientists, and a similar group in the vaccination organization based in Belgium. Prioritized on the basis of social and public health befits rather than commercial return, DDW projects have targeted 11 diseases[86] and implemented 13 clinical programs for medicines and vaccines against these diseases. Approximately 15-20% of clinical development projects focused on these 11 listed diseases, including drugs and vaccines. Exhibit 4 (Appendix) presents GSK's DDW pipeline, published in the 2006 Annual Report.

2. Preferential Pricing Systems

Pfizer, GSK, and Novartis all offer some system of preferential pricing, mostly on a case-by-case basis with little standardization or transparency in the negotiation process. In the absence of a systematic global tiered pricing system, exploitative results potentially occur due to differential bargaining power. As shown throughout the paper, pricing for drugs, depending on patent filings and negotiations, differ dramatically even among neighboring countries, subject to supply and demand fluctuations. Hence, industry analysts argue that by actively pursuing a policy of systematic, transparent, tired pricing for products, companies not only achieve greater cost-effectiveness of international aid, but developing country Health Ministries can better plan health interventions in a more rational and sustainable manner. Currently, individually-negotiated, case-by-case price reductions have not sufficiently met the needs of developing countries, especially since each company fears the possibility of a "race to the bottom" on drug prices. Overall, the lack of industry coordination on pricing schemes has impeded drug access of small developing countries and violated fairness standards.[87] Moreover, companies potentially leverage their figurehead public-private initiatives as a form of loss-leader good – to penetrate new markets through donations of one specific drug, while keeping the prices of other drugs in the portfolio high, as in the case of the Diflucan partnership of Pfizer.

The possibility of industry-wide pricing coordination, however, is not an elusive aspiration. Recognizing the need to address the cost of medicines for the treatment of HIV/AIDS, UNAIDS, the World Health Organization, UNICEF, the UN Population Fund, the World Bank, and seven pharmaceutical companies (Abbott Laboratories, Boehringer Ingelheim, Bristol-Myers Squibb, GlaxoSmithKline, Gilead Sciences, Merck & Co., Inc. and F. Hoffmann–La Roche) formed the United Nations Accelerating Access Initiative (AAI).[88] With the objective of working with governments, international organizations, and other stakeholders to broaden access while

[85] "Novartis Institute for Tropic Disease." Novartis. http://www.nitd.novartis.com/corporate_research/index.shtml Accessed: April 2007

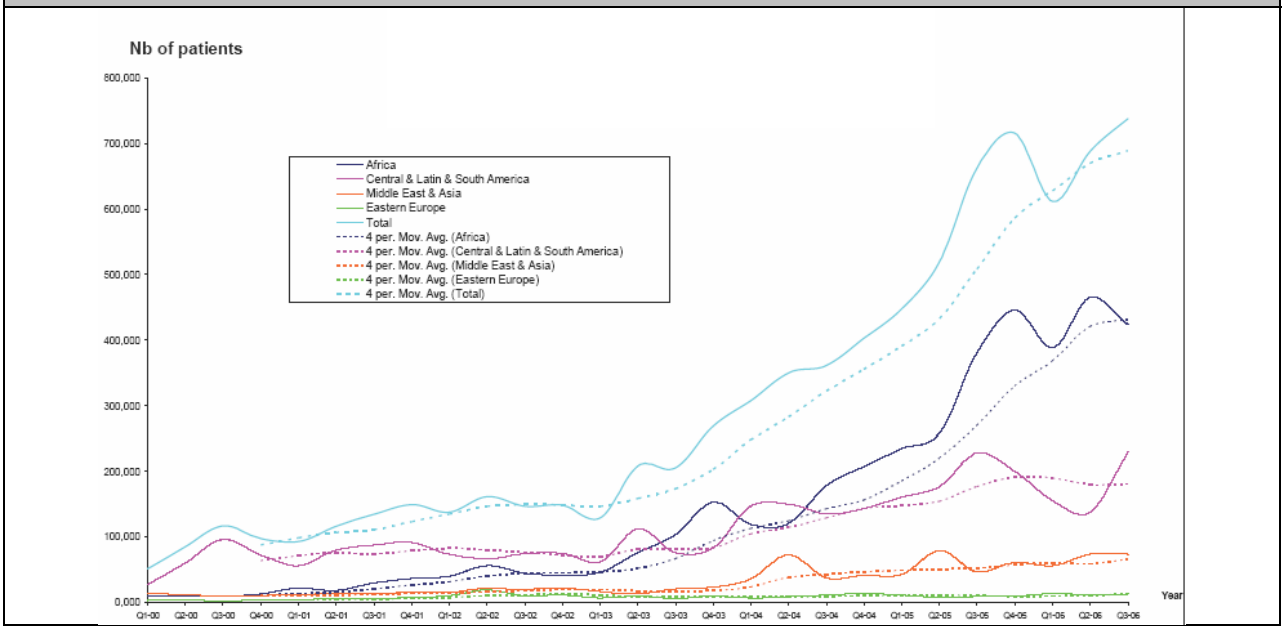
[86] HIV/AIDS, malaria, leishmaniasis, dengue fever, hepatitis C, hepatitis E, N. meningitis, cervical cancer, TB, chlamydia and pneumococcal disease

[87] "Beyond Philanthropy: The Pharmaceutical Industry, CSR, and the Developing World." Oxfam, 2002.

[88] "Accelerating Access Initiative." IFPMA. http://www.ifpma.org/Health/hiv/health_aai_hiv.aspx Accessed: April 2007

ensuring rational, affordable, safe and effective use of drugs for HIV/AIDS-related illnesses, AAI pharmaceutical companies have agreed to simultaneously coordinate HIV/AIDS drug pricing to increase affordability. In a short time, AAI has garnered many successes, already involving 49 countries which have created comprehensive national plans and reached agreement on prices with the involved pharmaceutical companies.[89] As shown below, the number of treatments delivered by the AAI globally has substantially increased since its inception in 2000.

Figure 7. AAI Program – Total Number of Patients Served



Source: AAI, 2006

As a testament to the success of industry-wide pricing coordination in collaboration with supranational institutions, government agencies, and respected NGOs, by the end of September 2006, more than 738,000 people living with HIV/AIDS in developing countries received treatment with at least one ARV medicine provided by AAI companies. In the past two years, the total number of patients receiving treatment from AAI companies more than doubled, with an increase of 104% since September 2004. In a remarkably short six year period, the number of people in Africa receiving treatment under AAI increased 45-fold since the establishment of the AAI in May 2000, aiding over 424,000 patients.[90] By setting clear pricing standards for AAI participant countries and coordinating disbursement, the industry optimized social and economic performance by increasing access to drugs without compromising competitive position relative to other players. In short, by cooperating and setting common standards, companies do not feel as if their individual preferential pricing decisions harm shareholder value by deviating from industry parity. Hence, given the social and economic benefits of industry coordination of social responsibility programs and pricing, supranational institutions and NGOs should facilitate dialogue to involve and mediate private sector participation, setting a fair framework for cooperation and delineating priorities.

[89] *Ibid*.
[90] "Accelerating Access Initiative (AAI) - Fact Sheet." AAI, 2006.

Industry Recommendations and Conclusions

As pharmaceutical companies increasingly dedicate more resources to corporate social responsibility programs focused on global access to medicines, new industry-wide standards need to be adopted in order to ensure accurate financial and social reporting. Since global access initiatives manage a corporation's reputational risk, pharmaceutical companies have an obligation to provide reliable information to the public and fulfill their promised commitments in a public-private partnership. By working in conjunction with governments, supranational institutions, and NGOs, the pharmaceutical industry can dramatically improve access to essential medicines, especially given the unique R&D, marketing, and drug production capabilities. To mitigate the risks of pursuing an initiative independently, industry coordination better allocates resources to maximize social outcomes, minimizing overlapping initiatives, pooling knowledge, and maximizing the social impact of spending.

Need for Transparency and Standardization in Reporting

Unlike financial reporting, no standards have been set for accurate corporate social responsibility reporting. For investors and consumers interested in comparing philanthropy initiatives across companies, difficulties emerge due to the lack of standardization in the reporting of total financial contribution and a fair mechanism to assess overall impact. For example, although a company may report annual financial commitments for one initiative, it may refrain from providing financial data for other initiatives or choose to publish only an aggregate amount over a period of time with no indication on when funds were disbursed. Moreover, information about specific initiatives is highly decentralized with many disparate press releases and fact sheets circulating on the web, thus hindering navigation.

Hence, to increase transparency and standardization in reporting, the following recommendations are suggested:

- Companies should adopt Global Reporting Initiative (GRI) standards in presenting social data. As an initiative aiming to standardize economic, environmental, and social performance reporting, the GRI has developed a highly-regarded Sustainability Reporting Framework (G3 guidelines) to ensure comparability, reliability, and relevance.[91] To date, nearly 1000 organizations in over 60 countries have declared their use of the GRI Reporting Framework. Out of the entire pharmaceutical industry, however, only the following 25 companies have adopted GRI standards in at least one of their social responsibility reports. In light of the higher volume and importance of pharmaceutical company corporate philanthropy, standardization of reporting constitutes an essential area of concern. Hence, companies should be encouraged to adopt GRI standards as a means to improve the quality and comparability of financial and social commitments.

[91] GRI guidelines and objectives can be viewed at: http://www.globalreporting.org/ReportingFramework/G3Online/

Figure 8. Pharmaceutical Companies Compliant with GRI Framework	
Allergan Inc	Janssen Pharmaceutical Limited
Apoteket AB	Johnson & Johnson
AstraZeneca plc	Kyowa Hakko Kogyo Co Ltd
Bayer AG	Laboratorios Asociados Nupel SL
Bristol-Myers Squibb Company	Merck & Co Inc
Celltech Group plc	Merck KGaA
Chugai Pharmaceutical Co Ltd	Novartis International AG
Dr Reddy's Laboratories Ltd	Novo Nordisk A/S
Eisai Co Ltd	Pliva dd
Eli Lilly and Company	Recip AB
F Hoffmann-La Roche Ltd	Sharon Laboratories Ltd
GlaxoSmithKline plc	Wyeth
GlaxoSmithKline SpA	

- Financial contributions should be reported on an annual basis, broken done by cash grants versus estimated value of product donation. The method of valuing product donations should also be clearly defined. Such transparency would aid social impact assessment studies, providing researchers and analysts with fair benchmarks to gauge relative performance and overall corporate social responsibility commitment. The analysis in this paper was hampered significantly by irreconcilable reporting differences, which made comparative contribution assessment highly difficult. Often times, aggregate figures over a period of time hide a company's annual commitment.

- R&D reporting on developing world diseases has to reach parity with conventional pipeline reporting, identifying key developments at each phase. Moreover, companies should publish target expenditures for R&D on infectious diseases.

- Social data should be reported on an annual basis, subject to a periodic third-party social audit to increase credibility and unreliability. Unlike financial reports, most companies publish social performance reports only sporadically – hence, data is often outdated or of nebulous content.

Industry Pricing and Patent Policy Transparency

Given the absence of a uniform global tiered pricing system, corporations should ideally publish a list of pricing offers made to developing countries, along with additional conditions on offers. Moreover, price reductions should not be limited to one or two "flagship" drugs, but cover a range of products relevant to the developing country. Through transparent pricing systems, corporations can not only more effectively manage reputational risk, but also substantially increase social impact and improve the overall industry competitive context. So far, the industry has responded positively. According to an industry survey, Merck supported the idea because "announcing prices publicly simplifies the process for countries and other buyers" and

Abbot responded that a global price database would simply aggregate existent public information in a readily available and comparable form – a beneficial step in industry transparency.[92]

In regards to patent policies, companies should clearly delineate countries in which patents have been filed and enforced, as well as define exceptions. For example, Roche does not file nor enforce patents in all LDCs defined by the United Nations. Especially in light of recent public outcry and criticism, setting a clear policy and establishing industry-wide agreements on TRIPS enforcements and exceptions not only manages reputational risk, but achieves industry parity that sets equal competitive ground. To increase credibility, pharmaceutical companies should also disclose lobbying budgets and positions to insulate itself from criticism about a potential disconnect between purported global drug access objectives and intellectual property stances. For example, according to a recent New York Times article, confidential budget documents from the leading pharmaceutical trade group showed that millions of dollar will be dedicated to lobbying against price controls around the world, subsidizing 'like-minded organizations' and paying economists to produce reports beneficial to the industry. These documents show that the Pharmaceutical Research and Manufacturers of America (PhRMA) will spend at least $150 million – a 23% increase over the past year's budget of $121.7 million.[93] By pressuring the federal government to adopt stringent IP standards, as in the case before the Uruguay Round negotiations on TRIPS, pharmaceutical companies potentially create a conflict of interest. Hence, since managing reputation risk emerges as a key concern, pharmaceutical companies should clearly define their country-specific positions on IP enforcement in developing countries to evade severe criticism, as in the case of Novartis.

R&D Coordination

Companies carefully guard internal R&D compound databases for good reason. The recent decision of Pfizer to share its research findings with key public sector scientific endeavors, however, represents an important step in leveraging resources. Given commercial pressures, coordinating neglected-disease R&D research with accountable public sector partners effectively leverages resources and reduces the risk of bearing R&D costs individually.

According to the Global Network for Neglected Tropical Disease Control (GnNTD), around half of the world's population suffers from bilharzias, worms, elephantiasis, river blindness, and trachoma – equivalent to half of the burden of HIV/AIDS, malaria, and tuberculosis, which receive substantially more R&D funding. Given that 2.7 billion endure debilitating afflictions from the 13 most common tropical diseases[94], the Network then advocates that effective public-private partnerships can bring treatment costs down to 50 cents per person.[95] Since research in neglected tropical diseases is clearly unprofitable given the lack of a viable

[92] "Beyond Philanthropy: The Pharmaceutical Industry, CSR, and the Developing World." Oxfam, 2002.
[93] Pear, Robert. "Drug Companies Increase Spending on Efforts to Lobby Congress and Governments." New York Times. June 2003.
[94] African trypanosomiasis, Sleeping sickness, Kala-azar, Visceral leishmaniasis, Chagas Disease, Soil Transmitted Helminth Infections, Intestinal worms, Ascaris, Trichuris, Hookworm infection, Schistosomiasis, Bilharzia or snail fever, Urinary schistosomiasis, Hepatobiliary schistosomiasis, Lymphatic Filariasis, Elephantiasis, Onchocerciasis, River Blindness, Drancunculiasis, Guinea Worm, Trachoma, Leprosy, Buruli Ulcer
[95] "What are the neglected tropical diseases?" Global Network for Neglected Tropical Disease Control. http://gnntdc.sabin.org/what/what.html. Accessed: April 2007.

commercial market, companies are disincentivized to invest substantially in the field due to high opportunity costs of channeling away human resources and capital from profitable R&D expenditures. Although GSK and Novartis maintain institutes dedicated to neglected disease research, budgets remain small. The association of a drug company with one particular affliction has proven effective in corporate marketing and in social impact, as in the case of Merck (River Blindness), GSK (LF), Pfizer (Trachoma), and Novartis (Leprosy). By increasing ownership in a particular disease specialization, the company not only enhances public relations and builds key partnerships, but enhances overall industry resource allocation by preventing overlap. Hence, large pharmaceutical companies which have not yet defined a special area of concentration should consider the benefits of specializing in one form of neglected disease R&D instead of spreading resources thin.

Conclusion

With annual revenues easily topping $50 billion, the largest pharmaceutical companies possess an incredible network of R&D infrastructure, technical expertise, international distribution channels, and marketing know-how. Compared to the $867 million budgeted for the World Health Organization in 2005, each of the five largest pharmaceutical companies, on average, garner annual sales nearly forty times greater. Given their unique core competencies in drug development, manufacturing, and disbursement, pharmaceutical companies serve as a powerful ally in combating major health crises and increasing global access to medicine in the developing world. Through public-private partnerships and extensive drug donation and technology transfer programs, the private sector has targeted social objectives which they believe may eventually translate into a competitive advantage through boosting employee morale, managing reputational risk, penetrating new markets, forging new alliances, and improving overall competitive context.

In light of increasing public demand for corporate philanthropy and an internal recognition of the moral-economic imperative, pharmaceutical companies have substantially increased corporate philanthropy contributions through the support of public-private partnerships, drug donations, R&D commitments, and preferential pricing systems. Nevertheless, due to lack of transparency in social reporting and fragmented industry coordination on the issues of pricing, intellectual property, and neglected-disease R&D, pharmaceutical companies have not fully leveraged their global drug access programs to achieve the highest social impact. Moreover, given the consistent profitability of the pharmaceutical industry, resource commitments can be substantially increased without damaging shareholder value, especially since pharmaceutical companies possess a special capacity of rescue.

The proliferation of partnerships with NGOs and local governments, however, calls into question the issue of accountability and fair reporting. In the case of the Diflucan Partnership, critics challenged not only Pfizer's failure to procure the promised quantity of drugs, but also the company's opaque pricing policies which placed an undue burden on some developing countries. Likewise, the lack of social impact assessment or detailed reporting on GSK's Positive Action Program risks the possibility of a "bait and switch" tactic, in which companies claim reputational benefits without a reciprocal social investment. Hence, pharmaceutical companies should strive

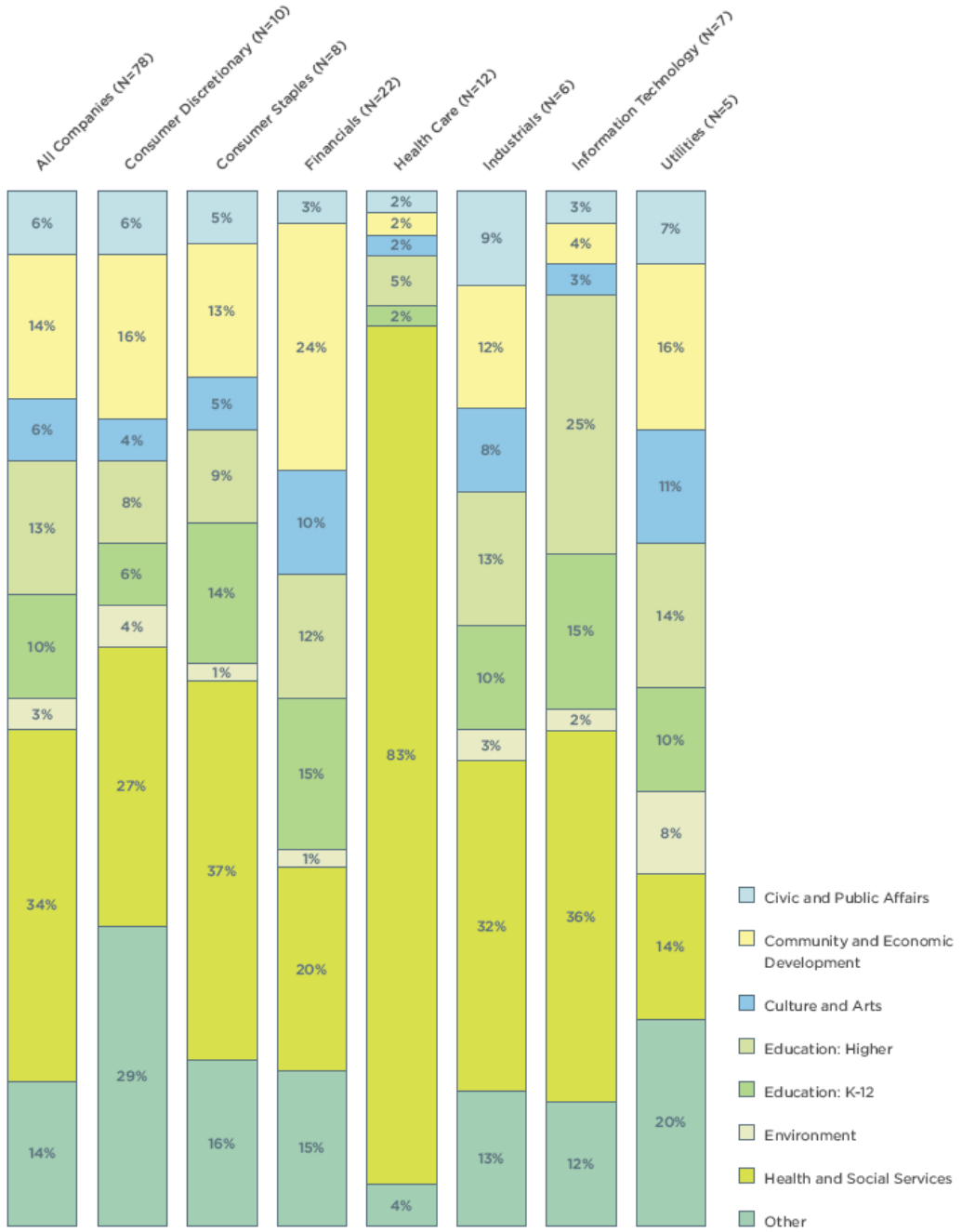
to coordinate social reporting under the GRI framework, thus facilitating comparability and improving credibility.

In concluding, due to the complexity of the global health dilemma, pharmaceutical companies have recognized that forging long-term partnerships with governments, supranational institutions, and NGOs constitute the only viable strategy to develop comprehensive health infrastructure capable of increasing access to medicines. Merely cutting prices and permitting generic licensing cannot solve the fundamental deficiencies of public sector malinvestment or underinvestment. Moreover, drug donations without any other accompanying initiative cultivate a system of dependency, not only disincentivizing future investment in neglected-disease R&D, but also rendering countries incapable of long-term self-sufficiency.

By coupling drug donations with comprehensive grassroots health delivery reform in conjunction with Health Ministries and NGOs, however, pharmaceutical companies have the capacity to dramatically expand global access to medicines. Consequently, greater industry coordination and communication not only enhances the efficacy of corporate social responsibility initiatives in addressing global health crises, but reduces the potential first-mover disadvantage, as successfully overcome in the case of AAI. With such a substantial revenue base and technical expertise, the pharmaceutical industry has driven major disease eradication initiatives, such as Novartis and Leprosy, Pfizer and Trachoma, Merck and River Blindness, and GSK and LF. The reconciliation of profit maximization with social objectives, however, remains an elusive and difficult question, as conflicting stakeholder interests often manifest in contradictory or confusing policy stances. Hence, greater clarity ought to be achieved through the establishment of a global framework for pricing and intellectual property beyond TRIPS in the developing world, thus providing a powerful and cogent social imperative.

Appendix:

Exhibit 1. Average Percentage Industry Breakdown of Total Giving by Program Area



Source: CECP, 2006

Exhibit 2. Novartis Foundation Leprosy Initiatives

Ongoing

Country	Year	Partner	Project Area	Purpose	Key Achievement
Global	2000 – ongoing	WHO Novartis	115 countries	To provide free MDT for all leprosy patients in the world through WHO in order to eliminate leprosy as a public health problem.	About 4 million patients cured through the MDT donation. Countries and patients have access to high-quality MDT free of charge.
India	1989 – ongoing	State Ministries of Health, NGOs Religious organizations	Gujarat (Districts of Surat, Valsad, Navsari Dangs. Completed: Banaskantha, Sabarkantha, Mehsana, Gandhinagar, Panchmahal) Maharashtra (Mumbai, Talasari), Goa. 18 centres of Missionaries of Charity around India.	To prevent, correct and care for leprosy-related disabilities and the social and economic rehabilitation of patients. To develop new field-based disability care modalities and train health care staff in the provision of services.	Pioneered the provision of comprehensive leprosy services. Services rendered to more than 10 000 patients. Many of the innovative modalities developed by CLCP have been adopted by the Government of India and NGOs.
Sri Lanka	1988 – ongoing	Ministry of Health, Leprosy Relief Emmaus Switzerland	Entire country	Ensure the sustainability of leprosy elimination efforts through easy access to treatment and disability care services.	Pioneered the use of social marketing for leprosy, leading to the elimination of leprosy as a public health problem. More than 25 000 patients cured of leprosy. Successfully integrated leprosy diagnosis and treatment into the general health services. Leprosy treated at all heath facilities in the country. Trained health care staff in managing leprosy disabilities (orthopaedic surgeons, physiotherapists, nurses). Leprosy managed alongside other disabilities.

Completed

Sierra Leone (Northern region)	1987 – 1992	Ministry of Health, German Leprosy Relief Association	Northern region of Sierra Leone (Bombali, Koinadugu, Port Loko and Kambia districts)	Create the preconditions for the introduction of MDT (training, setting up laboratory facilities, community awareness, drug supplies). Detect and treat all patients with MDT.	About 2 500 patients cured with MDT. Dramatic decline in case load (1 853 cases at start reduced to 353). Achievements were reversed with the protracted war.
Indonesia	1988 – 1994	Ministry of Health	West Kalimantan (Sambas, Pontianak and Ketapang districts), West Java (Kuningan, Majelenka and Tangerang districts), Moluccas (North Moluccas)	Create preconditions for the introduction of MDT. Detect and treat all patients with MDT.	MDT successfully introduced in all health centres in project areas, leading to the cure of more than 8 000 patients. Kuningan became the model for leprosy control in Indonesia.
Maldives	1990 – 1994	Ministry of Health, WHO	15 high risk islands	Chemoprophylaxis of leprosy.	More than 20 000 patients were examined; 75% of eligible population reached on first 5 islands and 91% on remaining 10.
Turkey	1990 – 1995	Ministry of Health, Leprosy Relief Emmaus Switzerland	Entire country	Trace, examine and treat all registered cases. Conduct field clinics in remote areas.	About 3 000 patients (94%) traced and cured with MDT. Unconventional solutions found to provide treatment to patients beyond reach of health services.

Exhibit 2 (Cont.). Novartis Foundation Leprosy Initiatives

Completed

Country	Year	Partner	Project Area	Purpose	Key Achievement
Venezuela	1991 – 1994	Institute of Bio-medicine, Ministry of Health	Entire country, with special focus on states of Apure, Merida and Tachira (not covered due to WHO immunoprophylaxis trial).	Provide MDT in entire country. Active case finding.	Full coverage achieved. About 2 300 patients treated; 4 400 completed treatment and surveillance. Leprosy integrated into Endemic Disease Control Project.
Mexico	1991 – 1998	Ministry of Health	Entire country, with focus on endemic states of Jalisco, Sinaloa, Guanajuato, Michoacan, Colima Sonora, Guerrero, Nayarity, Morelos and Querétaro.	Social marketing to generate and meet demand for leprosy services in order to eliminate leprosy as a public health problem.	Leprosy diagnosis and treatment available at public health facilities. Improved attitudes to leprosy. Leprosy successfully eliminated. About 9 000 patients cured.
Nepal	1990 – 1997	Ministry of Health, International Nepal Fellowship	Western region.	Facilitate the integration of leprosy services to the basic health services. Provide a backup service and specialized care during the transitional phase to treatment units in district capitals accessible by road.	Successful transition to integration. Leprosy services provided at basic health posts.
Democratic Republic of Congo	1992 – 1998	Ministry of Health, WHO	Sud Kivu (Bukavu, Bunyakiri, Kabare, Katana, Mwenga, Shabunda, Walungu) Maniema (Kindu, Kampene, Kasongo, Kibombo) Kasai Occidental (Kasai).	Introduce MDT into areas with no leprosy services for decades.	Leprosy services started in all health zones of the project areas. More than 2 500 patients cured. Work disrupted due to security problems.
People's Democratic Rep. of China	1996 – 1998	HANDA	Guandong province (Guangzhou, Sian, Taihe).	Equip patients to earn a livelihood.	Set up a sewing school and micro-enterprises (e.g., quilting, farming).
Madagascar	1997 – 1999	Ministry of Health, WHO	Endemic east coast.	Understand social cultural concepts of leprosy in Madagascar. Change the image of leprosy in order to encourage early help seeking.	Study provided insights into extent of stigma surrounding leprosy. Communication campaign launched to encourage early help seeking.
India, Brazil, Ethiopia, Nepal	1997	BBC World Service Trust, WHO		Study to assess the feasibility of using mass media to change public perception of leprosy and encourage early help seeking.	The study led to the development and implementation of media campaigns in Nepal, India and Brazil financed by other agencies.
Brazil	1998 – 2001	Ministry of Health, WHO/PAHO, CONASEMS	Northeast region of Brazil.	Change the image of leprosy and improve patients' access to leprosy services.	Decentralization of leprosy services led by the Task Force. Communication materials to change the image of leprosy widely distributed. Telehansens, telephone help line, extended to a national toll free help line.
Nepal	1998 – 1999	International Nepal Fellowship	Buttwal (Western region).	Set up a referral centre for disability care.	Buttwal clinic functional and caters to patients from southern part of the Western region.
United Republic of Tanzania	2004	Ministry of Health	Endemic pockets in Tanga, Morogoro, Dodoma, Mwanza, Mtwara, and Tabora Rukwa, Ruvuma, Iringa, Kagera and Mara	Leprosy elimination campaigns and Special Action Programmes to eliminate leprosy in order to detect and treat the hidden cases and integrate leprosy services.	Campaigns led to the detection and treatment of 844 patients and training of local health staff.

Exhibit 3. Pharmaceutical Industry Financial Highlights

COMPARATIVE ANNUAL RATIO REPORT
(RATIO, EXCEPT AS NOTED)

	JOHNSN&JHNS Dec06	PFIZER INC Dec06	GLAXO-ADR Dec05	NOVARTIS Dec06	SANOFI-AVEN Dec05	ROCHE HLDG Dec05	ASTRAZENECA Dec05	MERCK & CO Dec06	ABBOTT LABS Dec06	WYETH Dec06	BRISTOL Dec06
PROFITABILITY											
Oper.Margin Before Depr (%)	29.620	41.941	34.930	29.042	30.006	30.676	32.428	32.991	28.559	30.335	19.443
Oper.Margin After Depr (%)	25.527	30.960	31.211	23.907	12.500	24.408	26.931	26.344	21.624	26.389	14.960
Pretax Profit Margin (%)	27.422	27.028	30.567	23.038	11.241	24.297	27.615	28.017	10.163	26.682	14.709
Net Profit Margin (%)	20.779	22.871	21.290	19.406	8.268	15.715	19.492	19.587	7.638	20.622	8.848
Return on Assets (%)	15.666	9.595	17.240	10.281	2.606	8.360	18.945	9.948	4.745	11.504	6.197
Return on Equity (%)	28.112	15.472	61.942	16.932	4.842	16.606	34.611	25.250	12.215	28.641	15.864
Return on Investment (%)	26.742	14.328	36.516	16.667	4.378	11.356	31.793	17.376	8.150	17.671	9.194
Return on Average Assets (%)	17.192	9.483	17.908	11.121	2.589	8.511	18.654	9.917	5.256	11.606	5.902
Return on Average Equity (%)	28.639	16.124	66.160	18.825	5.173	17.198	33.596	24.996	12.060	31.498	14.954
Return on Average Invest.(%)	27.217	14.803	38.063	18.296	4.405	11.904	31.011	17.399	8.573	18.662	8.612
DIVIDENDS											
Dividend Payout (%)	38.605	65.959	53.210	29.305	71.036	29.678	35.614	74.850	105.305	32.377	139.054
Dividend Yield (%)	2.204	3.707	3.026	1.532	1.672	1.118	2.109	3.486	2.381	1.984	4.255

COMPARATIVE INCOME STATEMENT
($ MILLIONS, EXCEPT PER SHARE)

	JOHNSN&JHNS Dec06	PFIZER INC Dec06	GLAXO-ADR Dec05	NOVARTIS Dec06	SANOFI-AVEN Dec05	ROCHE HLDG Dec05	ASTRAZENECA Dec05	MERCK & CO Dec06	ABBOTT LABS Dec06	WYETH Dec06	BRISTOL Dec06
Sales	53,194.000	48,201.000	37,854.852	36,031.000	32,341.686	28,066.627	24,143.000	22,636.000	22,476.322	20,350.654	17,914.000
Cost of Goods Sold	12,880.000	5,216.000	6,780.666	8,449.000	8,078.612	6,035.900	4,240.000	3,703.600	7,759.397	4,655.612	5,094.000
Gross Profit	40,314.000	42,985.000	31,074.186	27,582.000	24,263.074	22,030.727	19,903.000	18,932.400	14,716.925	15,695.042	12,820.000
Selling, General, & Administrative Exp.	24,558.000	22,769.000	17,851.455	17,118.000	14,558.555	13,421.052	12,074.000	11,464.500	8,297.956	9,521.655	9,337.000
Operating Income Before Deprec.	15,756.000	20,216.000	13,222.729	10,464.000	9,704.519	8,609.674	7,829.000	7,467.900	6,418.969	6,173.388	3,483.000
Depreciation,Depletion,&Amortization	2,177.000	5,293.000	1,407.697	1,850.000	5,661.660	1,759.203	1,327.000	1,504.600	1,558.750	803.040	803.000
Operating Profit	13,579.000	14,923.000	11,815.032	8,614.000	4,042.859	6,850.471	6,502.000	5,963.300	4,860.219	5,370.348	2,680.000
Interest Expense	181.000	517.000	733.928	266.000	525.785	290.538	494.000	375.100	416.172	570.247	516.000
Non-Operating Income/Expense	996.000	1,718.000	489.858	595.000	2,267.743	559.020	659.000	3,172.700	582.323	848.383	935.000
Special Items	193.000	(3,096.000)	0.000	(642.000)	(2,149.323)	(299.665)	0.000	(2,419.000)	(2,742.000)	(218.580)	(464.000)
Pretax Income	14,587.000	13,028.000	11,570.962	8,301.000	3,635.494	6,819.288	6,667.000	6,341.900	2,284.370	5,429.904	2,635.000
Total Income Taxes	3,534.000	1,992.000	3,293.221	1,282.000	564.863	1,691.512	1,943.000	1,787.600	559.615	1,233.198	610.000
Minority Interest	0.000	12.000	218.288	27.000	396.707	717.219	18.000	120.500	8.000	@CF	440.000
Income Before Extraordinary Items & Discontinued Operations	11,053.000	11,024.000	8,059.453	6,992.000	2,673.924	4,410.557	4,706.000	4,433.800	1,716.755	4,196.706	1,585.000
Preferred Dividends	0.000	5.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.026	0.000
Available for Common	11,053.000	11,019.000	8,059.453	6,992.000	2,673.924	4,410.557	4,706.000	4,433.800	1,716.755	4,196.680	1,585.000
Savings Due to Common Stock Equiv.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Adjusted Available for Common	11,053.000	11,019.000	8,059.453	6,992.000	2,673.924	4,410.557	4,706.000	4,433.800	1,716.755	4,196.680	1,585.000
Extraordinary Items	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Discontinued Operations	0.000	8,313.000	0.000	183.000	0.000	(9.127)	0.000	0.000	0.000	0.000	0.000
Adjusted Net Income	11,053.000	19,332.000	8,059.453	7,175.000	2,673.924	4,401.430	4,706.000	4,433.800	1,716.755	4,196.680	1,585.000

Source: S&P Market Insight, 2007

Exhibit 4. GSK Development Pipeline at the end of 2006 for diseases relevant to the developing world

Focus	Pre-clinical activity	Phase I	Phase II	Phase III	Marketed
HIV	✓ HIV-1 entry inhibitor NNRTI		integrase inhibitor		*Retrovir, Epivir, Combivir, Ziagen, Trizivir, Agenerase, Kivexa, Telzir*
Vaccines	✓ Malaria (*P. vivax*) HIV Chlamydia	HIV HIV (DNA-antiviral vaccine)	Malaria (*P. falciparum*) TB Hepatitis E Dengue Fever	*Synflorix* (pneumococcus disease) Cervarix (Cervical cancer) N.meningitis combinations	*Rotarix* – (rotavirus) *Havrix* – (Hepatitis A) Engerix-B – (Hepatitis B) *Twinrix* – (Hep A&B) *Infanrix/Tritanrix* – DPT family (Diptheria, Tetanus, Pertussis) *Boostrix* – (DTP acellular) Polio Sabin – (Polio) *Priorix* – (Measles, Mumps and Rubella) *Typherix* – (Typhoid) *Hiberix* – (Haemophilus influenzae type b) *Mencevax* ACW – (meningitis)
Malaria	✓		tefenoquine	CDA	Lapdap, Halfan, Malarone
TB	✓				
Other	✓ Hepatitis C		sitamaquine (visceral leishmaniasis)		*Zentel* (de-worming agent) *Pentostam* (visceral leishmaniasis) Banocide (lymphatic filariasis – GSK India)

Source: GSK, 2006

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