



Pharmaceuticals Rank as Most Profitable Industry, Again

“Druggernaut” Tops All Three Measures of Profits In New Fortune 500 Report

In a year that saw a drop in employment rates, a plunge in the stock market and symbols of America's economy literally come crashing down, the pharmaceutical industry continued its reign as the most profitable industry in the annual Fortune 500 list.

While the overall profits of Fortune 500 companies declined by 53 percent – the second deepest dive in profits the Fortune 500 has taken in its 47 years¹ – the top 10 U.S. drug makers increased profits by 33 percent.²

Collectively, the 10 drug companies in the Fortune 500 topped all three of the magazine's measures of profitability in 2001, according to *Fortune* magazine's annual analysis of America's largest companies.³

These companies had the greatest return on revenues, reporting a profit of 18.5 cents for every \$1 of sales, which was *eight times higher* than the median⁴ for all Fortune 500 industries and easily more than the next most profitable industry, commercial banking (13.5 percent return on revenue).⁵ The drug industry also dominated others by realizing a return on assets of 16.5 percent – almost six times the median (2.5 percent) posted by all industries.⁶ Pharmaceutical companies completed the sweep with a return on shareholders' equity (33.2 percent) that was more than three times the median of all Fortune 500 industries (9.8 percent).⁷ (See Graph 1 and Table 1)

Fortune 500 drug companies attained this triple crown, in part, by hiking pill prices, advertising some medicines more than Nike shoes and spending much less than the industry has suggested on R&D.⁸

In addition, through its huge lobbying presence in Washington, D.C. the drug industry staved off congressional efforts to moderate rising drug prices.⁹ In fact, the industry went on the offensive last year in Congress, fighting for lucrative extensions of monopoly patents on drugs like Cipro, the antibiotic used to treat anthrax.¹⁰ Congress was all too willing to help, as it approved a patent extension program for pediatric drugs that will give drug companies \$592 million a year in added profits, according to the U.S. Food and Drug Administration (FDA).¹¹ (The FDA acknowledges that this is a conservative estimate based on a limited sample of drugs. Public Citizen has identified 15 drugs that alone could net an additional \$2 billion in profits from the six-month patent extensions.¹²)

No wonder Fortune says that the pharmaceutical industry “showed some impressive gains.”

These gains are nothing new. The latest figures reflect a trend that has been continuing for three decades.¹³ (See Graph 2) In the 1970s and 1980s, profitability of Fortune 500 medicine merchants (measured by return on revenues) was two times greater than the median for all industries in the Fortune 500. In the 1990s, when the intellectual property protections of the landmark Hatch-Waxman Act kicked in, the drug industry's profitability grew to almost four times greater than the median for all industries in the Fortune 500. The industry begins the 21st century with even better prospects – an aging population and annual increases in national spending on pharmaceuticals makes the future for top drug companies look healthier than ever.¹⁴

Pharmaceuticals Crusade for the ‘Holy Grail’

Together the 10 Fortune 500 drug companies earned \$37.2 billion in profits in 2001, up from the \$28.0 billion they reported in 2000.¹⁵ While these growing profits are encouraging for those who work and invest in the industry, rising drug costs are frustrating to many consumers, employers and insurers.

Americans spent \$154 billion on prescription drugs last year, an increase of more than 17 percent, according to a study by the National Institute for Health Care Management (NIHCM),¹⁶ a non-profit organization funded by the federal government and insurers such as Blue Cross Blue Shield.¹⁷ Spending on drugs increased last year for three reasons, according to NICHM: more prescriptions were written; prescriptions were shifted to newer, more costly drugs; and prescription prices jumped (an average of 10 percent) – for everything from drugs aimed at high cholesterol to low libido.¹⁸

That 10 percent hike in the average prescription price was six times greater than the inflation rate of 1.6 percent reported by the federal government.¹⁹

Stephen Schondelmeyer, a professor of pharmaceutical economics at the University of Minnesota, said drug companies sought to raise prices before the government imposed some form of price controls and before their blockbuster drugs lost patent protection.²⁰

Take Bristol-Myers Squibb and its diabetes drug Glucophage. Last year, Glucophage had sales of \$1.7 billion, which ranked 14th among all pharmaceuticals. In 2001 the average price of a Glucophage prescription rose 14.4 percent from \$63.00 to \$72.06, which contributed to an additional \$105 million in sales for the drug.²¹

But Bristol-Myers Squibb didn't stop there. By agreeing to test the safety and efficacy of Glucophage in children, the company gained a six-month monopoly patent extension from the federal government worth an estimated \$136.8 million in additional profits.²² The company also employed elite lawyers such as Laurence Tribe, C. Boyden Gray and Nicholas deB. Katzenbach to argue that its Glucophage tests in children should result in *three additional years* of monopoly patent protection.²³ So far those efforts have not succeeded.

“The Holy Grail of this industry is intellectual property protection,” said Nancy Chockley, president of NIHCM, pointing out that many pharmaceutical companies raise drug prices so they can squeeze more profits out of blockbusters facing patent expiration.²⁴

Recent examples of this trend are companies like Schering-Plough, which raised the price of its oral antihistamine Claritin by 12 percent in 2001, while it was anticipating releasing the similar drug Clarinex.²⁵

Blockbuster Drugs Bumper Are Crop for Profit Pharms

One thing that stands out about pharmaceutical profits for 2001 is the role that so-called blockbuster drugs (those with \$1 billion or more in sales) played. Not surprisingly, the two most profitable drug companies owned the most blockbusters, with four each.

Pfizer led U.S. pharmaceutical companies with \$7.8 billion in profits in 2001, which is more than the profits of all the Fortune 500 companies in the homebuilding, apparel, railroad and publishing industries combined.²⁶ Pfizer earned 24 cents on each dollar of sales and owned the highest-selling drug, a cholesterol reducer called Lipitor, which had sales of \$4.5 billion last year. The New York-based company also produced other blockbuster drugs such as Zoloft (\$2.1 billion in sales), Norvasc (\$1.7 billion) and Neurontin (\$1.4 billion in sales). That means Pfizer derived almost one-third of its revenue – and profits – from these four drugs.

Pfizer raised its prices on these four drugs by an average of 4.9 percent last year – three times the rate of inflation.

Merck was the second most profitable pharmaceutical, netting \$7.3 billion, which is more than the profits of all the Fortune 500 companies in the semiconductor, pipeline, food production, crude oil production, and hotel, casino and resort industries combined.²⁷ Merck netted 15 cents on the sales dollar and had the second highest selling drug, also a cholesterol reducer called Zocor that grossed \$2.7 billion. It manufactured three other blockbusters: Vioxx (\$2.0 billion in sales), Fosamax (\$1.0 billion) and Singulair (\$1.0 billion).

Merck raised the prices on these four drugs by an average of 6.5 percent last year – or four times the rate of inflation.²⁸

But Pfizer and Merck weren't the only companies with blockbusters. In fact, last year there were more companies with more blockbusters than ever before. In 2001, 29 drugs broke the billion-dollar barrier – nearly double the 1999 tally of 15.²⁹ And these 29 drugs had an extraordinary impact on the pharmaceutical market.

- For starters, these 29 drugs garnered more than \$52 billion in retail sales last year – or 34 percent of the total U.S. pharmaceutical market. That is a dramatic increase over 1999, when blockbusters accounted for \$23.4 billion in sales, or 21 percent of the entire U.S. pharmaceutical market.³⁰ (See Graph 3)
- These 29 drugs were far more expensive than most drugs. They had an average prescription price of \$97.71 last year – almost double the national average of \$49.84 per prescription.³¹

- The price hikes for these 29 drugs alone – out of 9,400 drugs on the market – accounted for 15 percent of the entire \$22.6 billion increase in national drug spending last year.³²

This growth spurt is nothing new according to industry analysts. According to *Fortune*, blockbusters “propelled the U.S. industry's phenomenal sales growth, from \$22 billion worldwide in 1980 to \$149 billion [in 2000, while] the industry's earnings rose 15 percent a year for much of the '90s.”³³

But while blockbuster drugs have flourished in recent years, some analysts say that 2002 and 2003 may be even more successful. During these years the FDA is scheduled to finish testing on 15 drugs that have great potential to become blockbusters. These drugs, if approved, could allow patients to treat illnesses like schizophrenia, multiple-sclerosis and even cancers like prostate, breast and colorectal cancer.³⁴

One reason for the popularity of blockbuster drugs is that they are among the most heavily advertised drugs. The five drugs that were most advertised via mass media (also called direct-to-consumer advertising) in 2000 were all blockbusters in 2001.³⁵ (The five drugs were Vioxx, Prilosec, Claritin, Paxil and Zocor.) In addition, 11 blockbusters were among the 25 most advertised drugs. Furthermore:

- Merck spent more to advertise Vioxx (\$160 million) than PepsiCo spent pitching Pepsi (\$125 million) and Anheuser Busch spent hyping Budweiser (\$146 million).³⁶
- Each of the top seven most heavily advertised drugs topped Nike's ad budget for its shoes (\$78 million).³⁷

As these blockbusters continue to grow, some critics are questioning the marketing practices behind these billion-dollar drugs. During 2001, the FDA either reprimanded or warned three companies for marketing their blockbuster drugs with “misleading” advertisements, brochures or other materials.

For instance, the FDA cited Pfizer, Inc. for two separate violations of the Federal Food, Drug, and Cosmetic Act in just a two-week period in 2001. In a July letter, the FDA stated Pfizer misled the public by making false claims in an eight-page advertisement for Lipitor, the best-selling drug of 2001 with \$4.5 billion in sales. The FDA said the “ad creates an overwhelming impression that Lipitor³⁸ is indicated to reduce the risk of developing coronary heart disease,” when there is nothing to substantiate the “effect of Lipitor on cardiovascular morbidity.” In a separate case, the FDA claimed Pfizer used a marketing brochure for Neurontin³⁹ that was misleading. In June of 2001, the FDA wrote a letter to the company telling them to stop using the brochure, which used a series of false claims to advertise the \$1.4 billion drug.

The FDA wrote similar letters in 2001 to Merck about misleading materials marketing Vioxx⁴⁰ and Pharmacia for false or misleading statements made during promotional audio conferences about Celebrex.⁴¹

Profits, Marketing Bigger Priorities than R&D

It's important to note that the drug companies' annual reports reveal where their revenues go – and what their priorities really are. The drug industry has long maintained that it needs extraordinary profits to fuel risky R&D into new medicines. But the reports show that the companies plow far more into profits and marketing and administration than into R&D. Consider:

- Fortune 500 drug companies channeled 18.5 percent of revenue into profits last year. Yet they spent just 12.5 percent of revenues on R&D. (See Graph 4)
- Eight of the 10 most profitable Fortune 500 drug companies devoted more of their revenue to profits than to R&D. (See Graph 5)

Finally, it should also be noted that the drug industry does not dispute that it is by far the most profitable in the country, according to the annual Fortune 500 analysis. Instead, the drug industry has contended that it needs extraordinary profits, built on high prices, to fund expensive and risky R&D.⁴² To bolster its claim, the industry has touted a flawed study by the Tufts Center for the Study of Drug Development – which is largely funded by pharmaceutical companies.

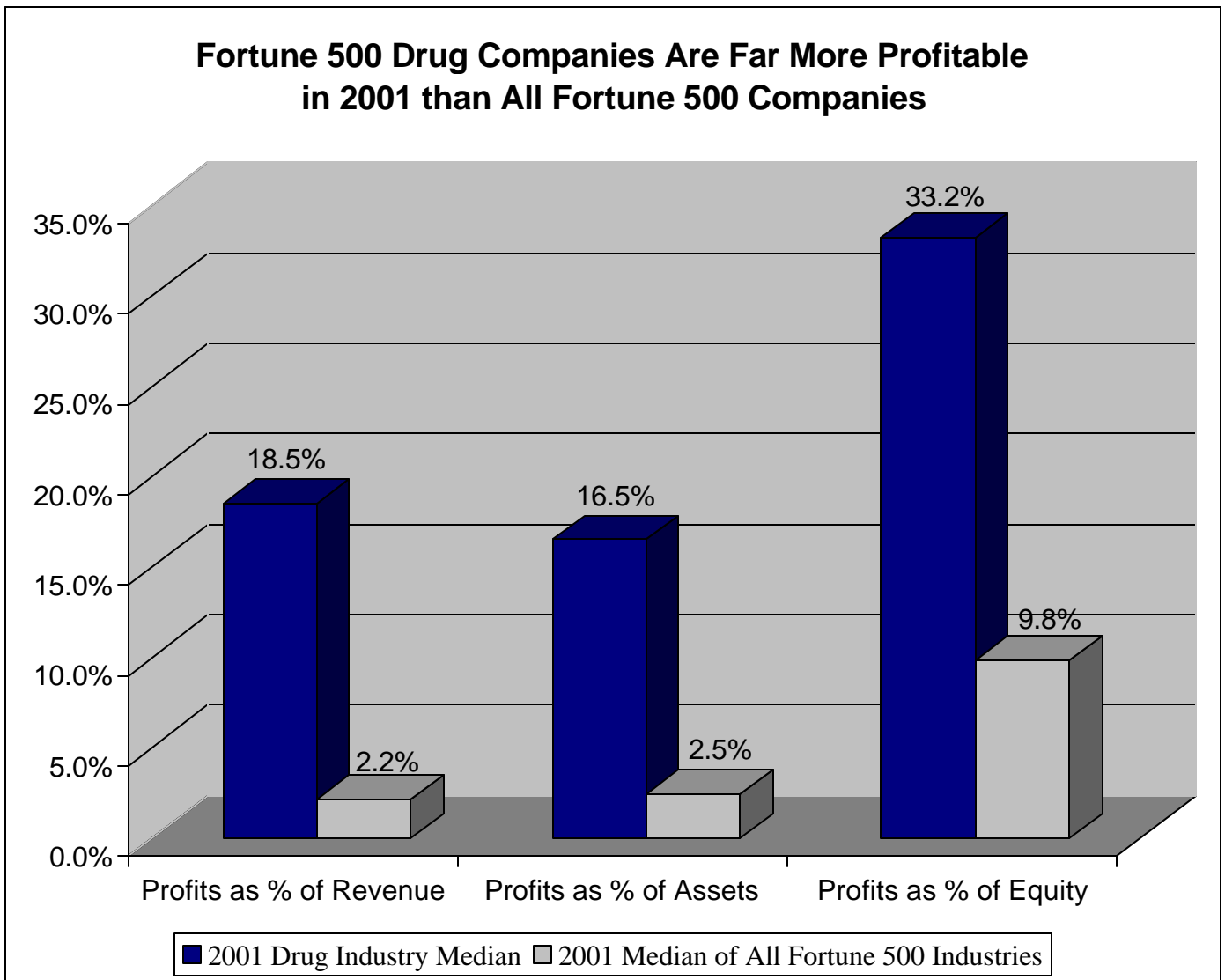
The Tufts Center study, which was unveiled in November 2001, put the average R&D cost for each new drug⁴³ brought to market at \$802 million. Public Citizen believes that the Tufts Center study significantly overstates real R&D costs. Public Citizen's analysis suggests that real R&D costs are likely to be as much as 75 percent lower.⁴⁴

The Tufts Center study has two dramatic flaws, according to Public Citizen. First, it is not representative of real drug industry R&D because none of the 68 drugs used in the Tufts study received any government support – a fact admitted by the study's author, Joseph A. DiMasi, at a Nov. 30 briefing on the report.⁴⁵ Many, if not most, drugs brought to market receive financial support from the government at some stage in their discovery and development.⁴⁶ Therefore, the Tufts study focuses on a skewed sample of drugs and inflates the actual cost of R&D for the average drug.

The second major flaw of the Tufts Center study is that it exaggerates the actual R&D expenditures for its sample of drugs. Specifically, the new Tufts Center estimate of \$802 million includes significant expenses that are tax deductible and theoretical costs that drug companies don't actually incur. For example, roughly half of DiMasi's estimate (\$399 million) is the "opportunity cost of capital" – a theoretical calculation of what R&D expenditures might be worth if they were invested elsewhere. DiMasi calculated actual out-of-pocket R&D costs for drugs in the study at \$403 million per new drug.

Those out-of-pocket expenditures are *pre-tax* costs, however. Drug companies can and do deduct 34 percent of their R&D expenses under federal tax law. Therefore, the actual after-tax cash outlay for each drug in the new Tufts study is about \$240 million, according to Public Citizen. But it must be stressed that the average R&D cost for each new drug brought to market is significantly less than \$240 million because that figure applies only to the drugs used in the Tufts study – which are not a representative sample of all new drugs.

Graph 1



Source: *Fortune* magazine, April 2002, Fortune 500 (www.fortune.com).

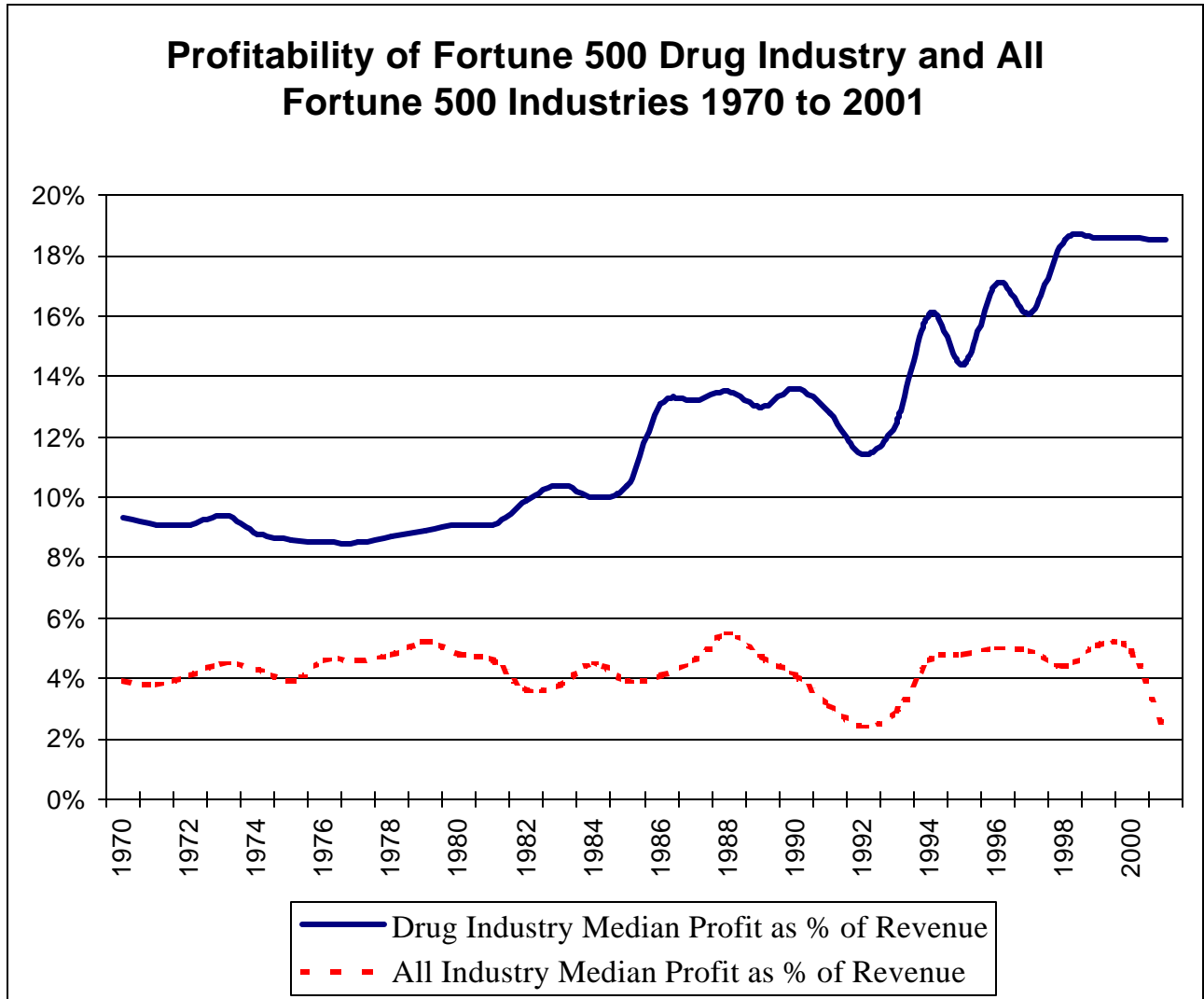
**Table 1:
Fortune 500 Drug Companies Profit and Revenue Increases in 2001**

Rank	Company	Revenues		Profits		Profits as % of		
		\$ millions	% Change From 2000	\$ millions	% Change From 2000	Revenues	Assets	Stockholders' Equity
1	Merck	\$47,716	18%	\$7,282	7%	15%	17%	45%
2	Johnson & Johnson	\$33,004	13%	\$5,668	18%	17%	15%	23%
3	Pfizer	\$32,259	9%	\$7,788	109%	24%	20%	43%
4	Bristol-Myers Squibb	\$21,717	2%	\$5,245	11%	24%	19%	49%
5	Pharmacia	\$19,299	4%	\$1,501	109%	8%	7%	12%
6	Abbott Laboratories	\$16,285	19%	\$1,550	-44%	10%	7%	17%
7	Wyeth*	\$14,129	2%	\$2,285	N/A	16%	10%	56%
8	Eli Lilly	\$11,543	6%	\$2,780	-9%	24%	17%	39%
9	Schering-Plough	\$9,802	0%	\$1,943	-20%	20%	16%	27%
10	Amgen	\$4,016	11%	\$1,120	-2%	28%	17%	22%
Total	–	\$209,770	–	\$37,162	–	–	–	–
Median	–	\$17,792	7.5%	\$2,533	7%	18.5%	16.5%	33.2%

* On March 11, 2002, American Home Products changed its name to Wyeth.

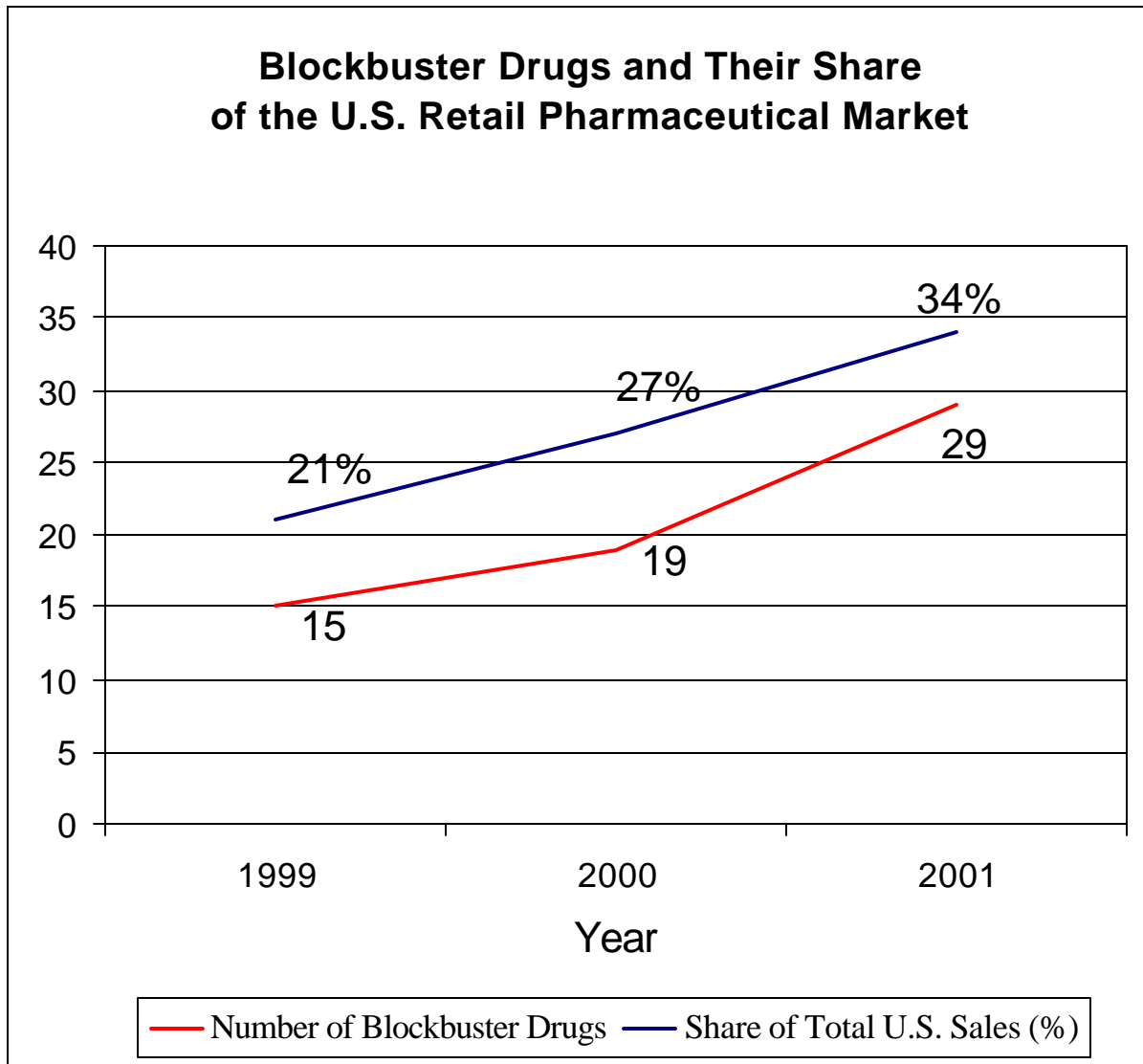
Source: *Fortune* magazine, April 2002, Fortune 500 (www.fortune.com).

Graph 2



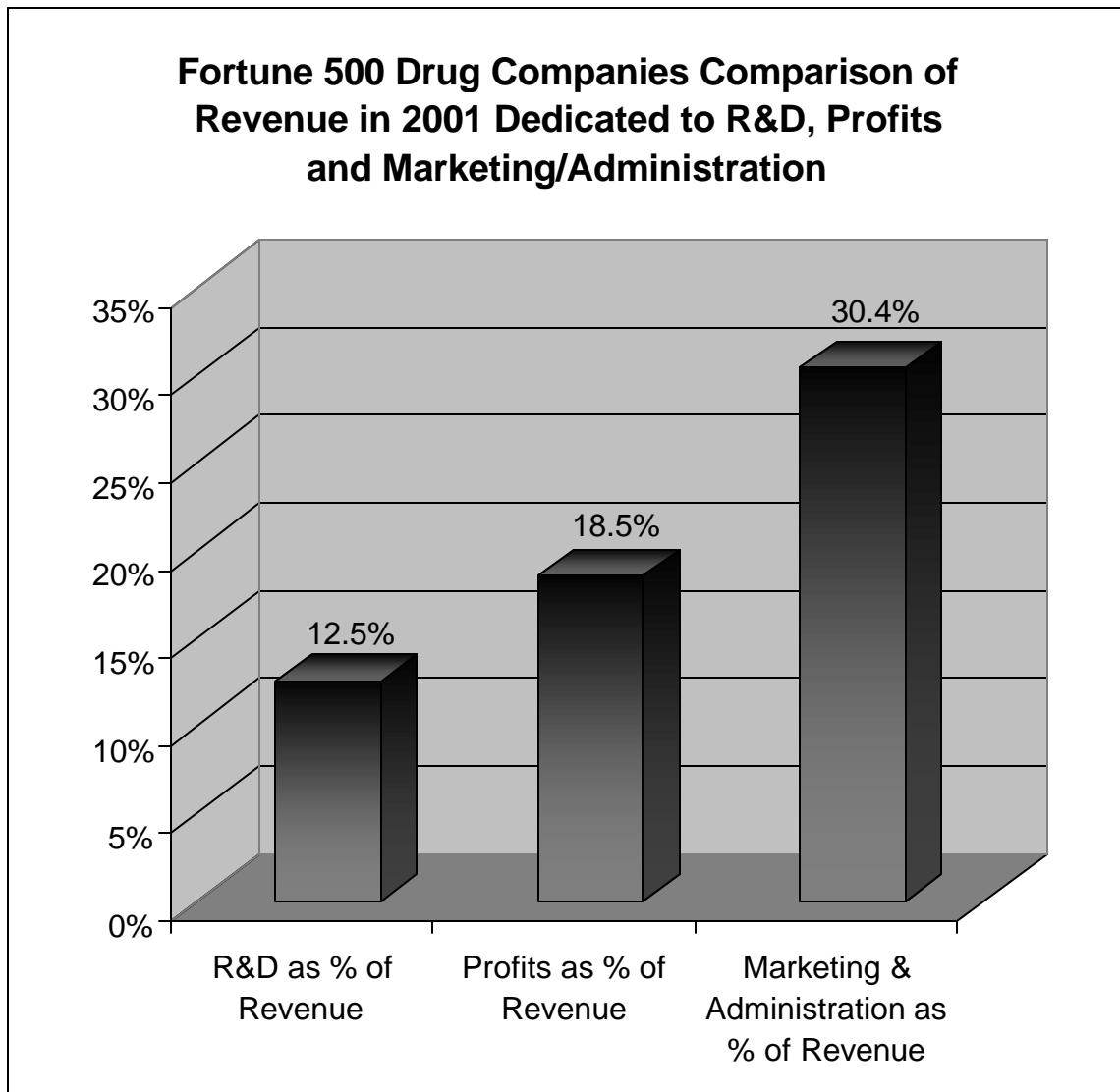
Source: Public Citizen update of Stephen W. Schondelmeyer calculation, *Competition and Pricing Issues in the Pharmaceutical Market*, PRIME Institute, University of Minnesota based on data found in *Fortune* magazine, 1958 to 1999; *Fortune* magazine, April 2002, Fortune 500 (www.fortune.com).

Graph 3



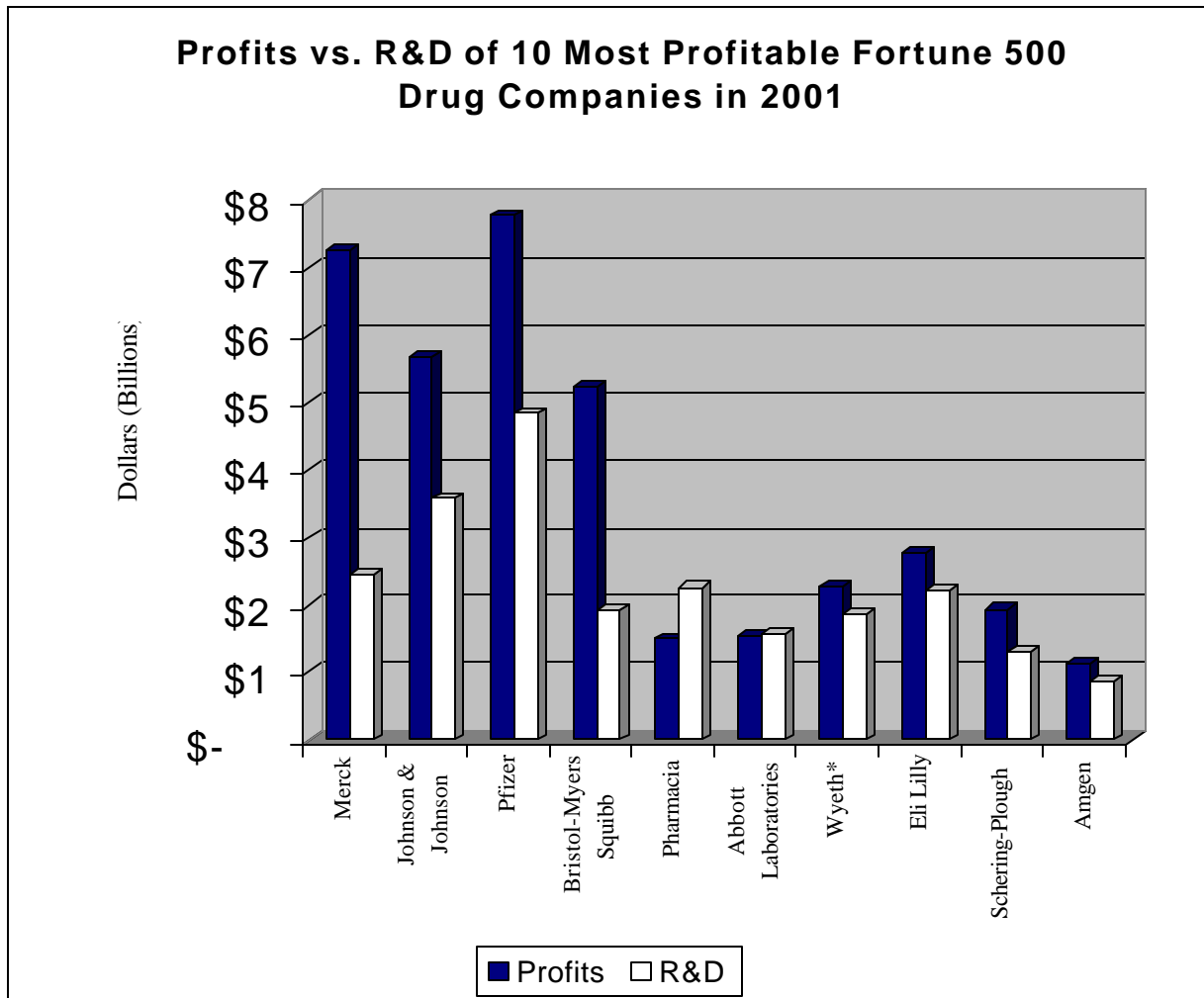
Source: National Institute for Health Care Management, "Prescription Drug Expenditures in 2000: The Upward Trend Continues," May 2001 and "Prescription Drug Expenditures in 2001: Another Year of Escalating Costs," April 2002.

Graph 4



Source: Public Citizen analysis of company annual reports; *Fortune* magazine, April 2002, Fortune 500 (www.fortune.com).

Graph 5



* On March 11, 2002, American Home Products changed its name to Wyeth.

Source: *Fortune* magazine, April 2002, Fortune 500 (www.fortune.com).

Endnotes

¹ http://www.fortune.com/indexw.jhtml?channel=artcol.jhtml&doc_id=207023

² Public Citizen analysis of Fortune 500 data for calendar years 2000 and 2001. In year 2000, the 11 drug companies in the Fortune 500 (published in April 2001) had total profits of \$28.025 billion. In year 2001, the 10 drug companies in the Fortune 500 (published in April 2002) had total profits of \$37.162 billion, for an increase of \$9.137 billion, or 32.6 percent more than they had in the previous year.

³ Public Citizen analysis of Fortune 500 data, specifically three tables cited below http://www.fortune.com/lists/F500/indsnap_41.html

⁴ http://www.fortune.com/lists/F500/topperf_ind_mostprofit_rev.html

⁵ Ibid.

⁶ http://www.fortune.com/lists/F500/topperf_ind_mostprofit_asset.html

⁷ http://www.fortune.com/lists/F500/topperf_ind_mostprofit_equity.html

⁸ Public Citizen, “Rx R&D Myths,” July 2001.
<http://www.citizen.org/publications/release.cfm?ID=7065>

⁹ Public Citizen, “The Other Drug War,” July 2001.
http://www.citizen.org/congress/campaign/special_interest/articles.cfm?ID=6537
See also: Leslie Wayne and Melody Petersen, “A Muscular Lobby Tries to Shape Nation’s Bioterror Plan,” *The New York Times*, November 4, 2001.
<http://www.nytimes.com/2001/11/04/business/04PHAR.html?searchpv=past7days>

¹⁰ Public Citizen, “Patently Offensive,” November 2001.
http://www.citizen.org/congress/reform/drug_patents/pediatric/articles.cfm?ID=6435

¹¹ U.S. Food and Drug Administration, “The Pediatric Exclusivity Provision,” Status Report to Congress, January 2001.

¹² Public Citizen analysis of 15 drugs that have received the six-month pediatric patent extension, or are slated to receive the six-month patent extension. See Public Citizen’s “Patently Offensive” (http://www.citizen.org/congress/reform/drug_patents/pediatric/articles.cfm?ID=6435) for details on the added sales of the 15 drugs. The combined added revenue for these drugs (\$10.647 billion) can then be multiplied by the average return on revenue (18.5 percent) for Fortune 500 drug companies to get an estimated profit generated by the six-month patent extensions.

¹³ http://www.fortune.com/indexw.jhtml?channel=artcol.jhtml&doc_id=207023

¹⁴ The National Institute for Health Care Management (NIHCM), “Prescription Drug Expenditures in 2001: Another Year of Escalating Costs,” April 2002. The study shows the total number of prescriptions in the U.S. increasing steadily in recent years (up 7 percent to 3.1 billion prescriptions last year) with no signs of the trend abating.

<http://www.nihcm.org/spending2001.pdf>

¹⁵ http://www.fortune.com/lists/F500/indsnap_41.html

¹⁶ The National Institute for Health Care Management (NIHCM), “Prescription Drug Expenditures in 2001: Another Year of Escalating Costs,” April 2002.

¹⁷ The National Institute for Health Care Management (<http://www.nihcm.org/aboutframe.html>)

¹⁸ The National Institute for Health Care Management, “Prescription Drug Expenditures in 2001: Another Year of Escalating Costs,” April 2002. Higher drug prices accounted for 37 percent of the increase in national spending; a shift to newer more costly drugs accounted for 24 percent of the increase; and more use of drugs accounted for 39 percent of the increase.

¹⁹ Milt Freudenheim, “Spending on Prescription Drugs Rises Sharply,” *The New York Times*, March 29, 2002.

²⁰ Ibid.

²¹ The National Institute for Health Care Management, “Prescription Drug Expenditures in 2001: Another Year of Escalating Costs,” April 2002.

²² See n. 12. According to Public Citizen’s analysis, Glucophage would realize approximately \$570 million in added sales from a six-month patent extension. Multiply that by Bristol-Myers Squibb’s return on revenue rate (24 percent) for 2001 to get estimated profits of \$136.8 million generated by a six-month patent extension.

²³ C. Boyden Gray (Wilmer, Cutler & Pickering), “Citizen Petition” to the U.S. Food and Drug Administration on behalf of Bristol-Myers Squibb, December 26, 2001. Nicholas deB. Katzenbach, “Memorandum to the United States Congress Re: Proposed Amendment to the Hatch-Waxman Act,” November 29, 2001. Laurence Tribe, “Memorandum to the United States Congress, Subject: Constitutional Analysis of H.R. 2887’s Proposed Amendment to Hatch-Waxman Act Eliminating Three-Year Clinical Studies Exclusivity Period.” (Undated)

²⁴ Phone interview with Nancy Chockley on 04/03/02.

²⁵ Public Citizen analysis of data from The National Institute for Health Care Management, “Prescription Drug Expenditures in 2001: Another Year of Escalating Costs,” April 2002.

²⁶ Public Citizen analysis of Fortune 500 data accessed at:
http://www.fortune.com/lists/F500/topperf_ind_mostprofit_rev.html

²⁷ Ibid.

²⁸ Public Citizen analysis of data from The National Institute for Health Care Management, “Prescription Drug Expenditures in 2001: Another Year of Escalating Costs,” April 2002.

²⁹ Public Citizen analysis of NIHCM data from “Prescription Drug Expenditures in 2000: The Upward Trend Continues,” May 2001 and “Prescription Drug Expenditures in 2001: Another Year of Escalating Costs,” April 2002.

³⁰ Ibid.

³¹ Public Citizen analysis of NIHCM data from “Prescription Drug Expenditures in 2001: Another Year of Escalating Costs,” April 2002.

³² Ibid. Note: 2001 data on pharmaceutical advertising is not yet available from NIHCM and is prohibitively expensive for Public Citizen to purchase. In addition, it is likely that much of the industry’s advertising in 2000 didn’t pay full dividends until 2001.

³³ <http://www.business2.com/articles/mag/0,1640,12590,FF.html>

³⁴ <http://boston.bizjournals.com/boston/stories/2002/01/07/story1.html>

³⁵ The National Institute of Health Care Management, “Prescription Drugs and Mass Media Advertising, 2000,” November 2001.

³⁶ Ibid.

³⁷ Ibid.

³⁸ <http://www.fda.gov/cder/warn/2001/9607.pdf>

³⁹ <http://www.fda.gov/cder/warn/2001/10174.pdf>

⁴⁰ <http://www.fda.gov/cder/warn/2001/9456.pdf>

⁴¹ <http://www.fda.gov/cder/warn/2001/DD9684.pdf>

⁴² Alan Holmer, the president of the drug industry’s Washington lobby group, the Pharmaceutical Research and Manufacturers of America (PhRMA) said: “Believe me, if we impose price controls on the pharmaceutical industry, and if you reduce the R&D that this industry is able to provide, it’s going to harm my kids and it’s going to harm those millions of other Americans who have life-threatening conditions.” National Public Radio’s “Talk of the Nation,” January 2, 2001.

⁴³ The Tufts Center study focuses on new chemical entities (NCEs) which it defines as drugs that have never been tested before in humans. The \$802 million figure counts the cost of failed, as well as successful drugs.

⁴⁴ <http://www.citizen.org/pressroom/release.cfm?ID=954>

⁴⁵ Ibid.

⁴⁶ Ibid. Also see Public Citizen's "Rx R&D Myths," accessible at <http://www.citizen.org/publications/release.cfm?ID=7065>