

The Prescription Drug User Fee Act: History Through the 2007 PDUFA IV Reauthorization

name redacted

Specialist in Drug Safety and Effectiveness

June 27, 2008

Congressional Research Service

7-.... www.crs.gov RL33914

Summary

This report, last updated in June 2008, provides a history of the Prescription Drug User Fee Act through its third reauthorization—as PDUFA IV—in September 2007. As the 112th Congress turns to the law's next reauthorization—PDUFA V, CRS has prepared another report that describes current law and the PDUFA V proposal (legislative language and the performance goals Agreement between FDA and industry representatives). It also explores the impact of PDUFA on FDA application review time and the agency's Human Drugs Program budget, and issues that Congress is likely to discuss as it prepares for anticipated PDUFA V reauthorization. For activity in the 112th Congress, please see CRS Report R42366, Prescription Drug User Fee Act (PDUFA): Issues for Reauthorization (PDUFA V) in 2012, by (name redacted)

In 1992, Congress passed the Prescription Drug User Fee Act (PDUFA I) to give the Food and Drug Administration (FDA) a revenue source—fees paid by the pharmaceutical manufacturers—to supplement, not replace, direct appropriations. The impetus behind the 1992 law stemmed from the length of time between a manufacturer's submission of an FDA New Drug Application (NDA) or Biologics License Application (BLA) and the agency's decision on approval or licensure. FDA had attributed the delay, which affected patients and manufacturers, to constraints on its ability to hire and support review staff. Congress reauthorized the user fee program in 1997 (PDUFA II), in 2002 (PDUFA III), and, most recently, in 2007 (PDUFA IV), as Title I of the Food and Drug Administration Amendments Act of 2007 (FDAAA, P.L. 110-85).

Congress intended PDUFA to diminish the backlog of applications at FDA and increasingly shorten the time from submission to decision. PDUFA II expanded the program's scope to include activities related to the investigational phases of a new drug's development, and to increase FDA communications with industry and consumer groups. PDUFA III again expanded the scope of authorized activities to include both preclinical development and a three-year postapproval period.

In keeping with the law, FDA has worked with the drug manufacturers to set PDUFA performance goals, which the Secretary of Health and Human Services (HHS) has submitted in letters to the chairs of the relevant congressional authorizing committees. The Secretary also submits annual performance and financial reports.

In crafting PDUFA IV, the most recent reauthorization, the 110th Congress addressed workload and compensation adjustments; expanded the authorized range of safety activities to include development of data collection systems and analytic tools, and enforcement of postapproval study, labeling, and risk evaluation and mitigation strategy requirements; increased public communication requirements; and authorized a user fee for the advisory review of prescription drug television ads.

The general view is that PDUFA has succeeded. FDA has added review staff and reduced its review times. At each reauthorization, however, discussion returns to certain issues in the context of PDUFA that also reflect broader FDA concerns. These include budget choices under limited resources, including the relationship between direct appropriations and user fees; the identification and amelioration of conflicts of interest when the regulated industry is a major source of industry funding; and the tension between making new drugs available to the public and ensuring that those drugs be safe and effective.

Contents

Before Prescription Drug User Fees	. 1
The Prescription Drug User Fee Act and Its Reauthorizations	. 2
PDUFA I	. 2
PDUFA II	. 4
PDUFA III	. 4
PDUFA IV	. 5
Issues Considered at Each PDUFA Reauthorization	. 6
Effect on Review Time	. 7
Effect on FDA Resources	. 8

Figures

Figure 1. Human Drugs Program: Budget, by Funding Source and Fiscal Year	. 9
Figure 2. Human Drugs Program: Full-Time Equivalent Positions, by Funding Source and Fiscal Year	.9
Figure 3. Drug Research and Development Timeline, Industry-FDA Interaction, and PDUFA Scope	10

Tables

Table 1. Median Approval Times for New Drug Applications (NDAs) and Biologics Licensing Applications (BLAs)	7
Table A-1. FDA Overall: Budget Authority, User Fees, and Total Program Level, Selected Years	13
Table A-2. Human Drug Program: Budget Authority, User Fees, and Total Program Level, Selected Years	14

Appendixes

Appendix. Resource History of FDA and Its Human Drug Program	3
--	---

Contacts

Author Contact Information	15
	10

In September 2007, Congress reauthorized the Prescription Drug User Fee Act (PDUFA).¹ This was the third five-year extension of the original 1992 law. Since 1993, the program has enabled the Food and Drug Administration (FDA) to collect and use fees from pharmaceutical manufacturers to review marketing applications concerning prescription drug and biological products. The law intends those fees to supplement direct appropriations not replace them. This most recent version of the user fee program, often referred to as PDUFA IV, retains the basic structure and elements of the original PDUFA. Like PDUFA II and PDUFA III, PDUFA IV addresses issues that had been either unnecessary or unrecognized in earlier versions of the law. The current authority expires October 1, 2012.

Companion CRS Report

This report, last updated in June 2008, provides a history of the Prescription Drug User Fee Act through its third reauthorization—as PDUFA IV—in September 2007.

As the 112th Congress turns to the law's next reauthorization—PDUFA V, CRS has prepared another report that describes current law and the PDUFA V proposal (legislative language and the performance goals Agreement between FDA and industry representatives). It also explores the impact of PDUFA on FDA application review time and the agency's Human Drugs Program budget, and issues that Congress is likely to discuss as it prepares for anticipated PDUFA V reauthorization.

For activity in the 112th Congress, please see CRS Report R42366, Prescription Drug User Fee Act (PDUFA): Issues for Reauthorization (PDUFA V) in 2012, by (name redacted).

This report reviews the history the four PDUFA authorizations as well as the issues concerning them. It first describes the situation that led to the introduction of prescription drug user fees. It then describes the initial PDUFA law and the incremental changes made in each of its reauthorizations. The report closes with a discussion of the intended and unintended effects of the prescription drug user fee program on FDA both within the human drug program and agencywide.

This report presumes some knowledge of the approval process for drugs and biologics. Readers unfamiliar with those activities might benefit by first reading CRS Report RL32797, *Drug Safety and Effectiveness: Issues and Action Options After FDA Approval*, by (name redacted).

Before Prescription Drug User Fees

The 1992 passage of PDUFA had its origin in the dissatisfaction from industry, consumers, and FDA itself. All three felt it took far too long from the moment a manufacturer submitted a drug or biologics marketing application to the time FDA's reached its decision. In the late 1980s, that process took a median time of 29 months.³ Patients had to wait for access to the products. For some patients, a drug in review—and therefore not available for sale—could be the difference between life and death. Manufacturers, in turn, had to wait to begin to recoup the costs of

¹ The Prescription Drug User Fee Amendments of 2007 is Title I of the Food and Drug Administration Amendments Act of 2007 (FDAAA, P.L. 110-85). For a description of all 11 titles of FDAAA, see CRS Report RL34465, *FDA Amendments Act of 2007 (P.L. 110-85)*, by (name redacted) and (name redacted).

² Update note: A more recent description of the drug approval process is in CRS Report R41983, *How FDA Approves Drugs and Regulates Their Safety and Effectiveness*, by (name redacted). (This is the only footnote updated since 2008.)

³ Food and Drug Administration (FDA), *Third Annual Performance Report: Prescription Drug User Fee Act of 1992, Fiscal Year 1995 Report to Congress*, December 1, 1995, at http://www.fda.gov/ope/pdufa/report95.html.

research and development. At that time, FDA estimated that each one-month delay in a review's completion cost a manufacturer \$10 million.⁴

FDA argued that it needed more scientists to review the drug applications that were coming in and the ones already backlogged in its files. It had not received sufficient appropriations to hire them. For decades FDA had asked Congress for permission to implement user fees; the pharmaceutical industry generally opposed them, believing the funds might go into the Treasury to reduce federal debt rather than help fund drug review.

The 1992 law became possible when FDA and industry agreed on two steps: performance goals, setting target completion times for various review processes; and the promise that these fees would supplement—rather than replace—funding that Congress appropriated to FDA. Those steps helped persuade industry groups the fees would reduce review times—and gave FDA the revenue source it had sought for over 20 years.

The Prescription Drug User Fee Act and Its Reauthorizations

PDUFA I

Congress first authorized FDA to collect fees from pharmaceutical companies in 1992 with the Prescription Drug User Fee Act (PDUFA, P.L. 102-571), which amended the Federal Food, Drug, and Cosmetic Act (FFDCA).⁵ Its goals were to speed up FDA's review of new drug applications for approval and to diminish its backlog of applications. PDUFA specified the activities on which FDA could spend the fees; most of the collections were to be used to hire additional reviewers.⁶

To keep funding predictable and stable, Congress required three kinds of prescription drug user fees, and specified that they each make up one-third of the total fees collected:

- **application review fees:** a drug's sponsor (usually the manufacturer) would pay a fee for the review of each new or supplemental drug-approval or biologic-license application it submitted;
- **establishment fees:** a manufacturer would pay an annual fee for each of its manufacturing establishments; and
- **product fees:** a manufacturer would pay an annual fee for each of its products that fit within PDUFA's definition.

⁴ Philip J. Hilts, "Plan to Speed Approval of Drugs: Makers Would Pay Fees to U.S.," *New York Times*, August 11, 1992, p. A1.

⁵ PDUFA is codified at 21 U.S.C. 379g and 379h.

⁶ Congress subsequently established user fee programs for medical devices and animal drugs. See CRS Report RL33981, *Medical Device User Fee and Modernization Act (MDUFMA) Reauthorization*, by (name redacted), and CRS Report RL34459, *Animal Drug User Fee Programs*, by (name redacted).

For FY1993, the standard application fee was approximately \$100,000. The law provided exceptions—either exemptions or waivers—for applications from small businesses, or for drugs developed for unmet public health needs or orphan diseases.⁷

PDUFA I authorized fee revenue limits for each of FY1993 through FY1997, allowing also for adjustments based on inflation. The fees collected in each fiscal year were to be in an amount equal to the amount specified in appropriations acts for such fiscal year.

In accordance with the agreement that brought about its passage, PDUFA I explicitly stated that the funds were to supplement, not supplant, congressional appropriations. The law included complex formulas, known as "triggers," to enforce that goal. FDA may collect and use fees only if the direct appropriations for the activities involved in the review of human drug applications and for FDA activities overall remain funded at a level at least equal to the pre-PDUFA budget, adjusted for inflation as specified in the statute.

PDUFA's basic goal was, each year, to reduce the time from the sponsor's submission of an application to FDA's decision regarding approval. Rather than listing specific performance goals in statutory language, Congress stated in the bill's "Findings" (Section 101) that:

(3) the fees authorized by this title will be dedicated toward expediting the review of human drug applications as set forth in the goals identified in the letters of September 14, 1992, and September 21, 1992, from the Commissioner of Food and Drugs to the Chairman of the Energy and Commerce Committee of the House of Representatives and the Chairman of the Labor and Human Resources Committee of the Senate, as set forth at 138 Cong. Rec. H9099-H9100 (daily ed. September 22, 1992).

This direction was not codified in the FFDCA; instead, Congress, with that "finding," incorporated the performance goals listed in FDA Commissioner David Kessler's September 1992 letters to the committee chairs.⁸ The predominant goal was that, by 1997, FDA would review 90% of standard applications within 12 months and 90% of priority applications within six months of application submission.⁹

PDUFA restricted FDA's use of collected fees to activities related to the "process for the review of human drug applications." In its FY2004 report to Congress, FDA listed such activities. They include investigational new drug (IND), new drug application (NDA), biologics license application (BLA), product license application (PLA), and establishment license application (ELA) reviews; regulation and policy development activities related to the review of human drug applications; development of product standards; meetings between FDA and application sponsor;

⁷ The Orphan Drug Act (P.L. 97-414) established incentives to encourage manufacturers to develop drugs for certain conditions, as designated by FDA, for which there otherwise are insufficient financial incentives for manufacturers to develop treatments.

⁸ James L. Zelenay, Jr., "The Prescription Drug User Fee Act: Is a Faster Food and Drug Administration Always a Better Food and Drug Administration?" *Food and Drug Law Journal*, vol. 60, no. 2, 2005, pp. 261-338.

⁹ FDA policy states: "A 'priority' designation is intended to direct overall attention and resources to the evaluation of applications for products that have the potential for providing significant preventative or diagnostic therapeutic advance as compared to 'standard' applications" (FDA, "Review Management: Priority Review Policy," *Manual of Policies and Procedures*, MAPP 6020.3, Center for Drug Evaluation and Research, April 22, 1996, at http://www.fda.gov/cder/mapp/6020-3.pdf, hereinafter "CDER MAPP 6020.3").

pre-approval review of labeling and pre-launch review of advertising; review-related facility inspections; assay development and validation; and monitoring review-related research.¹⁰

PDUFA II

Congress reauthorized PDUFA in 1997 as Title I of the Food and Drug Administration Modernization Act (FDAMA, P.L. 105-115). The reauthorization, referred to as PDUFA II:

- stated that the fees were to be used to expedite the drug development and application review process as laid out in performance goals identified in letters sent by the Secretary of the Department of Health and Human Services (HHS) to the two authorizing committees;
- mandated tighter performance goals, more transparency in the drug review process, and better communication with drug makers and patient advocacy groups; and
- allowed FDA to use PDUFA revenue to consult with manufacturers before they submitted an application. Previously FDA could use the fees only to review a manufacturer's application. Now FDA could meet with a manufacturer from the moment it began testing a new drug in humans. (See **Figure 3**.)

PDUFA III

Congress passed its second five-year reauthorization as Title V of the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (P.L. 107-188). PDUFA III:

- allowed FDA to adjust annual revenue targets based on changes in workload;
- required the agency to meet with interested public and private stakeholders when considering the reauthorization of this program before its expiration;¹¹
- allowed the collection, development, and review of postmarket safety information for up to three years on drugs approved after October 1, 2002, which allowed the agency to double the number of staff monitoring side effects of drugs already on the market;
- allowed biotechnology companies to request that FDA select an independent consultant (for which the manufacturer would pay) to participate in FDA's review of research activities;
- authorized two pilot programs for the continuous ("rolling") review of new drug applications for products designated for the fast track program because they

¹⁰ FDA, "Allowable and Excluded Costs for the Process for the Review of Human Drug Applications," Appendix C to *FY 2004 PDUFA Financial Report*, March 2005, at http://www.fda.gov/oc/pdufa/finreport2004/appendixC.html.

¹¹ H.Rept. 107-481, *Public Health Security and Bioterrorism Preparedness and Response Act of 2002*, conference report to accompany H.R. 3448, May 21, 2002.

would address serious or life-threatening conditions for which other treatments were not available; $^{\rm 12}$

- encouraged companies to include risk management plans in their pre-NDA/BLA meetings;
- allowed the use of fees to develop databases documenting drugs' use;
- allowed the use of fees for risk management oversight in the "peri-approval" period (i.e., two to three years post-approval);
- provided for "first cycle," preliminary reviews;
- required the HHS Secretary to note on FDA's website if a sponsor did not meet an agreed-upon deadline to complete a postmarket study, and to note if the Secretary considers the reasons given for study incompleteness to be unsatisfactory;
- required any sponsor who failed to complete timely studies to notify health practitioners both of this failure and of unanswered questions related to the clinical benefit and safety of the product; and
- added specificity to the availability and crediting of fees provision, stating that fees authorized be collected and available for obligation only to the extent and in the amount provided in advance in appropriations Acts; and that such fees are authorized to remain available until expended.

PDUFA allowed FDA to use fee revenue for activities that were part of the "process for the review of human drug applications." Both PDUFA II and PDUFA III expanded the scope of that definition beyond the review of a submitted NDA/BLA to include both earlier phases (preclinical development, clinical development) and later phases (post-approval safety surveillance and risk management).¹³

PDUFA IV

The Prescription Drug User Fee Amendments of 2007 (PDUFA IV) formed Title I of the FDA Amendments Act of 2007 (P.L. 110-85). This September 2007 reauthorization of PDUFA kept the basic approach to prescription drug user fees that Congress first enacted in 1992.¹⁴ The PDUFA provisions in FDAAA made some technical changes to the law's earlier versions and introduced some new elements.¹⁵ For example, PDUFA IV:

¹² See CRS Report RS22814, FDA Fast Track and Priority Review Programs, by (name redacted).

¹³ FDA, "Prescription Drug User Fee Act (PDUFA): Adding Resources and Improving Performance in FDA Review of New Drug Applications," white paper, November 10, 2005, at http://www.fda.gov/cder/pdufa/, hereinafter "FDA, PDUFA White Paper."

¹⁴ CRS Report RL34465, *FDA Amendments Act of 2007 (P.L. 110-85)*, by (name redacted) and (name redacted), includes details about PDUFA IV and the other titles in FDAAA.

¹⁵ For descriptions and discussion of the FDA proposal for PDUFA IV and the House and Senate consideration of PDUFA reauthorization within the context of other FDA issues, see CRS Report RL34089, *FDA Legislation in the 110th Congress: A Guide to S. 1082 and H.R. 2900*, by (name redacted), (name redacted), and (name redacted), and CRS Report RL34102, *FDA Legislation in the 110th Congress: A Side-by-Side Comparison of S. 1082 and H.R. 2900*, by (name redacted) et al.

- added a "reverse trigger" to the law, turning around the concept of "triggers" that the earlier PDUFA laws included to safeguard the pre-PDUFA level of appropriations. If appropriations for both FDA as a whole and for the agency's review of human drug applications exceed the amounts appropriated for those activities for FY2008, then authorized user fee revenue will be decreased by an amount up to \$65 million of the increase in appropriations;
- added fee revenues for drug safety totaling \$225 million over the five-year reauthorization;
- removed the calendar and time limitations on postapproval activities. FDA may, therefore, use PDUFA funding for authorized activities throughout the life of a product, rather than the three-year postapproval period that PDUFA III had allowed;
- expanded the list of postmarket safety activities for which the fees could be used to include developing and using adverse-event data-collection systems, including information technology systems; developing and using improved analytical tools to assess potential safety problems, including access to external data bases; implementing and enforcing new FFDCA requirements relating to postapproval studies, clinical trials, labeling changes, and risk evaluation and mitigation strategies; and managing adverse event reports;
- authorized the assessment and collection of fees relating to advisory review of prescription-drug television advertising. Manufacturer requests for predissemination review of advertisements would be voluntary, and FDA responses would be advisory. Only manufacturers that request such reviews would be assessed the new fees, which would include an advisory review fee and an operating reserve fee;
- codified in the FFDCA certain core elements, such as annual reporting requirements, of the prescription drug user fee program that, although included in PDUFA I, II, and III, were never placed into the FFDCA; and
- set forth new requirements intended to increase the Secretary's communication to the public regarding, for example, negotiations between the agency and industry.

The PDUFA IV amendments took effect on October 1, 2007. Authority to assess, collect, and use drug fees will cease to be effective October 1, 2012. The reporting requirements will cease to be effective January 31, 2013.

Issues Considered at Each PDUFA Reauthorization

PDUFA has attracted both criticism and praise from industry, FDA staff, consumers, and Members of Congress. The issues they raised played out in the legislative debate leading up to PDUFA IV, as they had at each earlier reauthorization. Although specific to PDUFA, these issues persist because they reflect broader questions about budget choices under limited resources, the identification and amelioration of conflicts of interest, and the tension between making new drugs available to the public and ensuring that those drugs be safe and effective. The next section of this report uses data covering the period leading up to PDUFA IV to illustrate those key issues likely to resurface, particularly as Congress plans for PDUFA V, scheduled for 2012.

Effect on Review Time

Based on its stated goals, PDUFA has been generally viewed as a success. FDA has added review staff and now completes it reviews of NDA/BLA applications more quickly and runs less of a backlog. Median time from an NDA or BLA submission to FDA's approval decision was 29 months in 1987; for the first two years of PDUFA I, it fell to 17 months. In later years, FDA presented separate calculations for standard applications and priority applications.¹⁶ **Table 1** shows median approval times for 1993 through 2006. In calendar year 2006, the median review times were 13.0 months for standard applications and 6.0 months for priority applications.

FDA attributes shorter approval times to PDUFA-funded staff increases. PDUFA also funds FDA activities with sponsors before their official NDA or BLA submissions, resulting in increasingly more complete applications that require fewer extensive resubmissions.

		Priority Review	Standard Review				
Calendar year	No. approved	Median total approval time (months)	No. approved	Median total approval time (months)			
1993	19	20.5	51	26.9			
1994	16	14.0	45	21.0			
1995	16	7.9	67	18.7			
1996	29	7.8	7.8 102				
1997	20	6.4	101	15.0			
1998	25	6.4	65	12.0			
1999	28	6.1	55	13.8			
2000	20	6.0	78	12.0			
2001	10	6.0	56	14.0			
2002	П	19.1	67	15.3			
2003	14	7.7	58	15.4			
2004	29	6.0	90	12.9			
2005	22	6.0	58	13.1			
2006	21	6.0	80	13.0			

Table 1. Median Approval Times for New Drug Applications (NDAs) and BiologicsLicensing Applications (BLAs)

Source: FDA, "CDER Approval Times for Priority and Standard NDAs and BLAs, Calendar Years 1993-2006, updated through 12/31/2006," at http://www.fda.gov/cder/rdmt/NDAapps93-06.htm.

Note: In its FY2002 performance report to Congress, FDA commented on the spike in approval times, as seen in the 2002 data, citing an "imbalance between resources and workload [that] resulted in significant stress to the program."

¹⁶ Beginning in 1997, the goals distinguish between standard and priority applications, assessed by a medical group team leader when FDA receives an application (FDA, CDER MAPP 6020.3, April 22, 1996).

As a result of PDUFA, *industry* faces shorter and more predictable review times. It has treated the per-application fee—about \$100,000 FY1993 and over \$1 million FY2008¹⁷—as an acceptable cost relative to the estimated \$10 million monthly cost of delay in the years immediately before PDUFA was enacted. Meanwhile, PDUFA has enabled *consumers* to have quicker access to new drugs.

Such quicker access, however, has raised concerns. First, critics ask whether PDUFA's emphasis on speed results in inadequate review. Second, they ask whether the increase in industry funding might lead to undue industry influence. They are concerned that PDUFA, in the name of speed, might lead FDA to sacrifice safety and effectiveness.

Many overlapping factors influence drug safety, most unrelated to the source of funding. Some safety problems cannot be identified before public marketing.¹⁸ In its consideration of PDUFA and in other plans for FDA, the Congress has discussed whether FDA has the authority and resources to identify and then act on problems during both the premarket and postmarket periods. It addressed these issues in FDAAA, both in the PDUFA title and a broader drug safety title.

Effect on FDA Resources

The key to the shortening of review times is the influx of funds that PDUFA allows. This section first describes the extent of the collected fees and then discusses that revenue in the context of the budget for both the human drug program and FDA overall. What began as a program to fund new drug review has budget, management, and policy implications beyond that.

Figure 1 and **Figure 2** illustrate the resource (funding and personnel) history of the FDA Human Drugs program from FY1989 through FY2007.¹⁹ (**Table A-1** and **Table A-2** in the **Appendix** provide detailed actual and inflation-adjusted budget figures, along with full-time equivalent positions, by funding source for selected fiscal years.) Beginning in FY1994, user fees have made up an increasing proportion of FDA's budget for human drug activities. While total funding has increased over the period, this has been entirely due to the increase in user fees. Congressional appropriations have remained essentially flat in real (i.e., inflation-adjusted) terms.

Indicating full-time equivalent (FTE) positions by funding source shows that the overall increase in personnel comes solely from the user fees first collected in FY1993 and that the overall increase in FTEs obscures a 19% decrease in FTEs funded by congressional appropriations from FY1992 to FY2007.

The PDUFA triggers (described above), in particular, and the relative contributions of appropriations and user fees to FDA's budget for human drugs have implications for budget planning both within the human drugs activity area and in agency-level decisions across all activities.

¹⁷ The FY2008 fee for an application requiring clinical data is \$1,178,000 (FDA, "Prescription Drug User Fee Rates for Fiscal Year 2008," *Federal Register*, vol. 72, no. 197, October 12, 2007, pp. 58103-58106).

¹⁸ See CRS Report RL32797, *Drug Safety and Effectiveness: Issues and Action Options After FDA Approval*, by (name redacted).

¹⁹ For a discussion of FDA-wide budget history, see CRS Report RL34334, *The Food and Drug Administration: Budget and Statutory History, FY1980-FY2007*, coordinated by (name redacted).



Figure 1. Human Drugs Program: Budget, by Funding Source and Fiscal Year





Sources: FDA Justification of Estimates for Appropriations Committees documents, FY1991 through FY2009. Data have been adjusted to constant FY2000 dollars for inflation using "Total Non-Defense" deflators from Office of Management and Budget, *Historical Tables, Budget of the United States, Fiscal Year 2008*, "Table 10.1, Gross Domestic Product and Deflators Used in the Historical Tables: 1940-2012," pp. 192-193.

Note: Total Program Level = Budget Authority + Fees.

Balance between pre- and postapproval activities. Because PDUFA initially allowed FDA to use the fees on only pre-approval activities (the review of manufacturer applications to market drugs and biologics) and still directs a majority of fees to those tasks, it is widely asserted that PDUFA is responsible for what some observers view as an inappropriate budget imbalance between FDA's premarket drug review and its postmarket safety activities. They point out how PDUFA requirements—the trigger requirements that congressional appropriations for FDA's

review activities be maintained at least at 1992 levels—and congressional budget trends increasing FDA responsibilities at relatively flat funding levels—result in a squeezing out of non-PDUFA related programs. Faced with losing fee revenue if PDUFA-authorized activities decrease, FDA must prioritize its use of appropriated dollars to those activities. Critics say that non-PDUFA activities, such as the review of generic drug applications, therefore suffer.

In part to address this concern, the Congress has, with each PDUFA reauthorization extended the scope of covered activities. The top and middle sections of **Figure 3** illustrate the five stages of drug development, beginning with basic research and continuing through preclinical development (which could be research in the laboratory or with animals), clinical research (the Phase 1, Phase 2, and Phase 3 trials that involve people), and FDA review; and the related industry-FDA interactions.²⁰ The bottom third displays the span of industry R&D activities over which the laws allowed PDUFA fees to cover FDA activities. The law authorized FDA to use PDUFA I fees to fund only those activities from NDA submission through the review decision; PDUFA II allowed FDA to use the funds for meetings with manufacturers during the clinical development stages, going, therefore, from the investigational new drug (IND) submission through review; and PDUFA III extended the time range at both ends, to include the pre-clinical development period and up to three years after marketing begins. PDUFA IV removes the three-year limit on postapproval activities. FDA may, therefore, use PDUFA funding for authorized activities throughout the life of a product.



Figure 3. Drug Research and Development Timeline, Industry-FDA Interaction, and PDUFA Scope

Source: Adapted by CRS from FDA, PDUFA White Paper, 2005, Figure 3.1. IND = Investigational New Drug

²⁰ FDA, PDUFA White Paper, 2005, Figure 3.1.

Industry influence. Some critics think that, through its provision of fees, the industry has too much influence over FDA actions. They believe that, by structuring industry participation into the setting of performance goals, the law creates conflicts of interest. This is compounded because, they say, the process of setting performance goals is not transparent.

Until an amendment in PDUFA IV that requires consumer participation as well, the law directed FDA and manufacturers to meet, in preparation for each PDUFA reauthorization, to discuss workload and revenue needed. FDA then submitted a letter to the authorizing committees that presents performance goals for the following five years. The performance goals regarding review activities were structured to include a length of time (in months) and the percent of applications that would be completed in that time.²¹ The industry participation in goal negotiation and the focus on review time created what some see as actual or the appearance of industry influence on the management of FDA resources. At the least, those speculations could threaten confidence in FDA reviews. At the worst are the concerns of some that the fee system contributes to quick and suboptimal reviews. FDA staff reports of pressure to meet performance goal deadlines suggest to some that safety and effectiveness data are being inadequately evaluated.²²

Interaction with congressional appropriations decisions. As previously noted, user fees are an increasing part of FDA's budget. In FY2008, user fees contribute 24.2% of FDA budget. Looking only at the agency's Human Drug Program (basically that is the Center for Drug Evaluation and Research and related activities of the Office of Regulatory Affairs), as in **Figure 1** (and **Tables A1 and A-2** in the **Appendix**) for FY2008, user fees contribute 48.4% of the drug program's budget. Not shown on the figure: the FY2008 enacted budget for the human drug program shows user fees contributing 58% of the pre-market activities total and 25.3% of the postmarket activities total.²³

FDA relies on fee revenue for maintaining its expert science base via staff retention. Critics say that FDA is becoming too dependent on industry fees to carry out its normal review activities. A related concern is that the large percentage of FDA's budget being covered by user fees may undercut congressional support for increases in direct appropriations to the agency.

²¹ In FY1994, for example, FDA's performance goal had been to review and act on 55% of new applications within 12 months; over the years, the goals reflected an increasing percentage of applications and a decreasing number of months in which to make a decision on those applications (FDA, "App. A. PDUFA Performance Goals, FY1993-FY1997," Third Annual Performance Report: PDUFA of 1992, FY1995 Report to Congress, December 1995; "PDUFA Reauthorization Performance Goals and Procedures," November 1997 letter enclosure; and "PDUFA Reauthorization Performance Goals and Procedures," June 2002 PDUFA III goals and procedures letter enclosure; all at http://www.fda.gov/cder/pdufa/default.htm).

²² See, for example: Union of Concerned Scientists, "FDA Scientists Pressured to Exclude, Alter Findings; Scientists Fear Retaliation for Voicing Safety Concerns: Public Health and Safety Will Suffer without Leadership from FDA and Congress," press release, July 20, 2006, at http://www.ucsusa.org/news/press_release/fda-scientists-pressured.html; "Text: Andrew C. Von Eschenbach. M.D. Confirmation Questions [from Senator Grassley] for the Record," *FDA Week*, vol. 12, no. 48, December 1, 2006; and "House Energy and Commerce Subcommittee on Oversight and Investigations Holds Hearing on Drug Safety," Congressional Transcripts, February 13, 2007, at http://www.cq.com/ news.do.

²³ FDA, Table "FDA Funding by Functional Activity, FY2008 Enacted," in "FY2009 Congressional Justification," Office of Management, Budget Formulation and Presentation, February 5, 2008, at http://www.fda.gov/oc/oms/ofm/ budget/2009/Exhibits/FY08FAT.htm.

Leaving aside some critics' distrust of the pharmaceutical industry's motives, other political and health analysts believe that drug application review is a regulatory responsibility that the federal government should shoulder completely. They believe that rather than rely on user fees, Congress should appropriate the full amount necessary to support FDA in its mission to protect the public's health.²⁴

²⁴ Note: FDA is not the only federal agency with program elements funded in part by fees that their regulated industries pay. Examples of others include Meat and Poultry Inspection (USDA); Commodity Grading and Certification Services (USDA); the Farm Credit Administration (USDA); Pesticide Registration Improvement Act of 2003 (EPA); Federal Communications Commission Regulatory Fees; and Securities and Exchange Commission Transaction Fees. Other user fee programs within FDA are the Medical Device Use Fee Amendments (MDUFA); the Animal Drug User Fee Act (ADUFA); the Mammography Quality Standards Act (MQSA); and export and color certification fees. FDA has proposed new user fee programs to help fund reinspections and generic drug reviews.

Appendix. Resource History of FDA and Its Human Drug Program

	(dollars in millions)											
	Budget authority ^a			All user feesb			Total			Fees as % of Total		
	(dollars)			(dollars)			(dollars)					
Fiscal year	Actual	Adj.c	FTE	Actual	Adj.c	FTE	Actual	Adj.c	FTE	\$	FTE	
1989	542	710	7,228	10	13	170	552	723	7,398	2%	2%	
1992	762	893	8,792	16	19	302	778	912	9,094	2%	3%	
1995	869	948	8,811	79	86	453	948	1,034	9,264	8%	5%	
1998	932	968	8,083	118	123	821	1,050	1,091	8,904	11%	9%	
2001	۱,099	1,075	7,805	179	175	1,184	1,278	1,250	8,989	14%	13%	
2004	1,401	1,287	8,567	278	255	1,574	1,679	1,542	10,141	17%	16%	
2007	١,583	1,330	7,705	391	329	I,864	1,974	I,658	9,569	20%	I 9 %	
2008 enacted ^d	1,720	1,409	7,844	549	450	2,131	2,270	I,860	9,975	24%	21%	
2009 requested ^e	1,771	1,415	8,075	628	502	2,426	2,400	1,917	10,501	26%	23%	

Table A-I. FDA Overall: Budget Authority, User Fees,and Total Program Level, Selected Years

Source: FDA Justification of Estimates for Appropriations Committees, FY1991-FY2009.

- a. Includes only direct appropriations; does not include the user fee amount that the appropriations bills also set.
- b. Includes fees obtained under the Mammography Quality Standards Act (MQSA), and fees collected for export certification, color certification, and Freedom of Information Act (FOIA) requests; advances and reimbursements; and fees pursuant to the Prescription Drug User Fee Act beginning in FY1993, the Medical Device User Fee and Modernization Act (MDUFMA) beginning in FY2005, and the Animal Drug User Fee Act (ADUFA) beginning in FY2005.
- c. Dollars have been adjusted for inflation to constant FY2000 dollars using "Total Non-Defense" deflators from Office of Management and Budget, *Historical Tables, Budget of the United States, Fiscal Year 2008,* "Table 10.1, Gross Domestic Product and Deflators Used in the Historical Tables: 1940-2012," pp. 192-193.
- d. The dollar values shown for FY2008 come from the enacted appropriation; in each year's budget justification documents, FDA presents an updated actual figure.
- e. The dollar and FTE values shown for FY2009 are from the President's request, which includes \$27 million in authorized fees for the advisory review of direct-toconsumer television advertisements for prescription drugs.

	Budget authority ^a			PDUFA user fees			Total			Fees as % of Total	
	(d	ollars)		(d	ollars)		(d	ollars)			
Fiscal year	Actual	Adjusted ^b	FTE	Actual	Adjusted ^b	FTE	Actual	Adjusted	FTE	\$	FTE
1989	131	172	1,913	0	0	0	131	172	1,913	0%	0%
1992	199	233	2,390	0	0	0	199	233	2,390	0%	0%
1995	218	238	2,278	48	53	295	266	290	2,573	18%	11%
1998	200	207	1,959	63	66	470	263	273	2,429	24%	19%
2001	219	214	I,824	104	102	711	322	315	2,535	32%	28%
2004	292	268	١,977	167	154	972	460	422	2,949	36%	33%
2007	315	265	1,772	228	192	1,143	544	457	2,915	42%	39%
2008 enacted ^c	353	289	1,816	327	268	I,348	680	557	3,164	48%	43%
2009 requested ^d	358	286	I,855	381	304	1,545	739	590	3,456	52%	45%

Table A-2. Human Drug Program: Budget Authority, User Fees,and Total Program Level, Selected Years

(dollars in millions)

Source: FDA Justification of Estimates for Appropriations Committees, FY1991-FY2009.

a. Includes only direct appropriations; does not include the user fee amount that the appropriations bills also set.

b. Dollars have been adjusted for inflation to constant FY2000 dollars using "Total Non-Defense" deflators from Office of Management and Budget, *Historical Tables, Budget of the United States, Fiscal Year 2008,* "Table 10.1, Gross Domestic Product and Deflators Used in the Historical Tables: 1940-2012," pp. 192-193.

c. The dollar values shown for FY2008 come from the enacted appropriation; in each year's budget justification documents, FDA presents an updated actual figure.

d. The dollar and FTE values shown for FY2009 are from the President's request, which includes \$27 million in authorized fees for the advisory review of direct-toconsumer television advertisements for prescription drugs.

Author Contact Information

(name redacted) Specialist in Drug Safety and Effectiveness [redacted]@crs.loc.gov, 7-....

EveryCRSReport.com

The Congressional Research Service (CRS) is a federal legislative branch agency, housed inside the Library of Congress, charged with providing the United States Congress non-partisan advice on issues that may come before Congress.

EveryCRSReport.com republishes CRS reports that are available to all Congressional staff. The reports are not classified, and Members of Congress routinely make individual reports available to the public.

Prior to our republication, we redacted names, phone numbers and email addresses of analysts who produced the reports. We also added this page to the report. We have not intentionally made any other changes to any report published on EveryCRSReport.com.

CRS reports, as a work of the United States government, are not subject to copyright protection in the United States. Any CRS report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS report may include copyrighted images or material from a third party, you may need to obtain permission of the copyright holder if you wish to copy or otherwise use copyrighted material.

Information in a CRS report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to members of Congress in connection with CRS' institutional role.

EveryCRSReport.com is not a government website and is not affiliated with CRS. We do not claim copyright on any CRS report we have republished.