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**Accrual Accounting in  
Federal Budgeting:**

**The Case of the PBGC**

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## **INTRODUCTION**

The federal budget faces all manner of problems. While discretionary spending programs generally receive the majority of public attention, recently entitlement programs such as Social Security and Medicare have started to dominate the budget picture and therefore started to gain public attention. The Pension Benefit Guarantee Corporation (“PBGC”) faces similar long-term structural problems and impacts the lives many past, present and future employees and so similarly deserves attention. This Briefing Paper provides general background on the PBGC while focusing its attention on two different methods of evaluating the PBGC’s short and long-term budget picture: cash flow accounting and accrual accounting. Part I provides an overview of the history and structure of the Federal Government’s pension law, primarily embodied by the Employee Retirement Income Security Act (“ERISA”), by exploring both the funding requirements for pension plans as well as the structure of the PBGC itself. Part II presents cash flow accounting estimates of the past, present and future PBGC obligations. Part III then presents similar, accrual accounting, estimates of the PBGC’s obligations. Part IV concludes by providing some preliminary arguments for preferring accrual accounting in the PBGC context.

### **I. PROGRAM OVERVIEW: HISTORY AND STRUCTURE**

#### **A. Introduction**

Before discussing the PBGC’s long-term financial health, it is important to lay out the structure of the legal regime in which the PBGC operates. This section will provide a summary of that regime with reference to both its general historical outline and its current structure.

In advance of describing the particulars of the relevant legal system, it is important to keep in mind which pensions this legal system covers and which it does not. The relevant laws in the area, as well as the PBGC, focus only on defined benefit pension plans and not defined contribution pension plans. Defined benefit plans commit an employer to providing a specific level of monetary benefit at a particular retirement age as a life annuity for the plan participant.<sup>1</sup> The formula for determining the given benefit varies by plan and generally includes various contingencies such as if an employee decides to retire before the specified retirement age.<sup>2</sup> One important choice an employer makes when establishing such a plan is whether or not to give past-service credit to employees that have already worked at the firm when the plan goes into place.<sup>3</sup> Since the obligations of such plans cannot be divined at the outset because they will depend on future hiring and firing decision as well as on choices by employers, actuaries attempt to calculate the obligations of these plans so as to determine the long-term funding required to finance such a plan.

In contrast, defined contribution plans do not face such long-term financing problems because they are structured such that an employer makes a payment to employees' accounts after which the employee has broad discretion over the money that has been contributed.<sup>4</sup> These contributions are generally based on a formula related to the salary of each employee.<sup>5</sup>

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<sup>1</sup> Kathryn J. Kennedy, *Pension Funding Reform: It's Time to Get the Rules Right (Part 1)*, TAX NOTES, Aug. 22, 2005, at 909.

<sup>2</sup> *Id.*

<sup>3</sup> *Id.* at 910.

<sup>4</sup> *Id.*

<sup>5</sup> *Id.*

## B. Pre-ERISA

Before the advent of ERISA, there was no pre-funding requirement for employer pensions plans.<sup>6</sup> That is, once an employer established a defined benefit pension plan, it was under no obligation to make sure it had funds available to pay its employees when their pension obligations were due. During this period, there were three general approaches taken by employers which mirror the conceptual approaches available to pension plan financing. The first approach employers used was a pay-as-you-go approach. Similar to what is used for Social Security, employers using this approach had funds available as monthly pension obligations became due.<sup>7</sup> The second approach, the terminal funding approach, meant that employers had enough money to pay employees the lump-sum payment they were due when they retired.<sup>8</sup> Finally, some employers used an advanced funding approach in which they tried to set aside funds during the working lifetime of their employees to offset the costs of retirement benefits.<sup>9</sup>

Even before ERISA, the Internal Revenue Service (“IRS”) imposed regulations on plans by requiring certain forms of minimum funding for plans to receive tax deductions. That is, qualified plans were required to fund to the level of current accruals plus interest on past-service liability.<sup>10</sup> The corresponding tax deductions were limited to the current accrual of benefits plus 10 percent of past-service liabilities.<sup>11</sup> The IRS also capped deductions at normal costs if past-service obligations were fully funded.<sup>12</sup> Normal

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<sup>6</sup> Kennedy, *supra* note 1, at 910; CONG. BUDGET OFFICE, A GUIDE TO UNDERSTANDING THE PENSION BENEFIT GUARANTEE CORPORATION 2 (2005), available at <http://www.cbo.gov/ftpdocs/66xx/doc6657/09-23-GuideToPBGC.pdf> [hereinafter GUIDE TO UNDERSTANDING].

<sup>7</sup> Kennedy, *supra* note 1, at 910.

<sup>8</sup> *Id.* at 911.

<sup>9</sup> *Id.* at 910-911.

<sup>10</sup> *Id.* at 911.

<sup>11</sup> *Id.*

<sup>12</sup> *Id.*

costs in this context are simply the portion of the total costs of the plan allocated to the current year. While the IRS did in some senses regulate pension plans, it is important to remember that an employer could terminate a plan at any time, even if it was unfunded.

### **B. ERISA's Funding Requirements**

In 1974, President Gerald Ford signed ERISA which dealt with a number of different issues, but in the context of pension reform it tackled two main issues: minimum funding standards to ensure a degree of pension plan prefunding and a Federal Government guarantee for workers in the event of plan insolvency.<sup>13</sup> In discussing each of these major areas of reform, this section will describe the 1974 reforms, some subsequent reforms and then clarify the current law in the area.

The basis for ERISA's funding rules is the requirement that all single employer plans must hire an actuary to compute current pension plan costs.<sup>14</sup> The required actuarial calculations include both annual costs of current accruals and amortized costs of the plan's actuarial liabilities.<sup>15</sup> Essentially, these calculations reveal the yearly costs of current obligations to retirees and any additional costs derived from past-service liabilities or previously unpaid yearly costs. These costs depend heavily upon interest rate and mortality assumptions – both of which were initially chosen by the plan's actuary.<sup>16</sup> In doing these calculations, ERISA allows for the amortization of any plan changes, benefit increases or decreases, so as to smooth out volatility in pension costs.<sup>17</sup> This way employers are not deterred from making changes to their plans simply because they will

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<sup>13</sup> *Id.*

<sup>14</sup> 26 C.F.R. § 1.412(c)(3)-1(b) (2006).

<sup>15</sup> 26 C.F.R. § 1.412(c)(3) (2006).

<sup>16</sup> Kennedy, *supra* note 1, at 911-912.

<sup>17</sup> 26 U.S.C. § 302(c)(2)(A) (2006) ; 29 U.S.C. § 1082(c)(2)(A) (2006); 26 C.F.R. § 1.412(c)(2)(A) (2006).

have to fund those changes immediately. In the Pension Protection Act of 1987, Congress required actuaries to use an interest rate assumption of at least 110 percent of a 3-year weighted average using the Treasury 30-year bond rate, although there was no penalty if the plan met its funding obligations at 100 % of the bond rate.<sup>18</sup> However, it was not until the Retirement Protection Act of 1994 that Congress specified the use of a particular mortality table.<sup>19</sup> In 1994, Congress also changed the interest rate requirement to be 105% of the 5-year average of the Treasury 30-year bond rate.<sup>20</sup>

Along with such estimates of annual and amortized costs of past, current and future obligations, ERISA required actuaries to report a “T account” for the plan which compared the yearly debits and credits associated with the plan.<sup>21</sup> Required debits included the minimum normal costs for each year as well as the amortized yearly amount of unfunded liability. These debits corresponded to the credits, which were simply the actual employer contribution made to the plan in the year.<sup>22</sup> The initial system was very simple: if the credits were equal to the debits then the plan was in compliance with the minimum funding rules.<sup>23</sup> If debits were greater than credits, the company was required to pay a 10 percent excise tax on the plan plus an additional 100 percent tax if there was not a correction made within a short period of time.<sup>24</sup> However, if the credits were greater than the debits, the balance carried over into the next year.<sup>25</sup>

In 1987, these rules were altered so that if a plan was funded at 90 percent of liabilities or above, it was subject to the old rules but if the plan fell below 90 percent

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<sup>18</sup> 26 C.F.R. § 1.412(b)(5)(B) (2006).

<sup>19</sup> 26 C.F.R. § 1.412(l)(7)(C)(ii) (2006).

<sup>20</sup> 26 C.F.R. § 1.412(l)(7)(C)(i) (2006).

<sup>21</sup> 26 U.S.C. § 302(a)(1) (2006); 29 U.S.C. § 1082(a)(1) (2006); 26 C.F.R. § 1.412(a)(1) (2006).

<sup>22</sup> 26 U.S.C. § 302(b-c) (2006); 29 U.S.C. § 1082(b-c) (2006); 26 C.F.R. § 1.412(b-c) (2006).

<sup>23</sup> 26 U.S.C. § 302(b)(2) (2006); 29 U.S.C. § 1082(b)(2) (2006); 26 C.F.R. § 1.412(b)(2) (2006).

<sup>24</sup> 26 U.S.C. § 302(a)(2) (2006); 29 U.S.C. § 1082(a)(2) (2006); 26 C.F.R. § 1.412(a) (2006).

<sup>25</sup> 26 U.S.C. § 302(b)(3) (2006); 29 U.S.C. § 1082(b)(3) (2006); 26 C.F.R. § 1.412(b)(3) (2006).

then the amortization periods were shortened which increased the plan's funding obligations.<sup>26</sup> Additionally, the 1987 legislation required that lump-sum distributions under a plan were valued at the same interest rate as current liabilities and not at the plan's overall long-term interest rate.<sup>27</sup>

With minor modifications over time, these funding rules have led to a relatively simple system. All plans have a funding standard account (FSA) such that if plan assets equal the present value of liabilities then the FSA is 0.<sup>28</sup> The FSA for each plan changes each year based upon normal accrual of benefits, investment losses by the plan and changes to the plan's structure that increase liabilities (debits) as well as contributions by the employers, investment gains by the plan and changes to the plan's structure that decrease liabilities (credits).<sup>29</sup> These debits and credits are amortized in a number of different ways depending on the reason for the change. If the FSA is equal to or greater than 0 then no contributions are required.

Deficit reduction contributions ("DRCs") can be required if the value of the assets of a plan is less than its liabilities. When the value of the assets of a plan compared to the value of its liabilities (the funding ratio) falls below 90 percent, DRCs are required.<sup>30</sup> If the unfunded liabilities were incurred before 1988, the plan has 18 years to amortize those liabilities.<sup>31</sup> A plan with liabilities incurred after 1987 must contribute so as to reduce the underfunding by 30 percent annually.<sup>32</sup> The 30 percent is reduced by 0.4

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<sup>26</sup> 29 U.S.C. § 1312 (2006).

<sup>27</sup> 26 C.F.R. § 1.411(a)(11)(B)(i) (2006).

<sup>28</sup> GUIDE TO UNDERSTANDING, *supra* note 6, at 5.

<sup>29</sup> *Id.*

<sup>30</sup> *Id.* at 6.

<sup>31</sup> *Id.*

<sup>32</sup> *Id.*

percent for every percentage point that the plan is funded above a 60 percent funding ratio.<sup>33</sup>

ERISA also continued the full funding limitation rule in the context of minimum funding. The full funding limit is the maximum tax deductible contribution an employer can make to its pension fund. Under ERISA, this became the difference between the plan's actuarial liabilities and the value of the plan. The value of the plan was determined by the lesser of the fair market value of the plan and the actuarial value of the assets.<sup>34</sup> Since the passage of ERISA, Congress has allowed employers to use a second method for determining their plan's full funding limitation. The full funding limit can be 90 percent of the plan's current liabilities minus the value of the plan's assets.<sup>35</sup>

## **B. The PBGC**

While the previously discussed funding rules were designed to encourage companies to prefund their pension obligations, ERISA also set up a system designed to guarantee a certain level of benefits in the event of plan insolvency. Technically, the PBGC, the cornerstone of this system, maintains two legally distinct programs, one for single-employers and one for multi-employers.<sup>36</sup> The PBGC spends most of its time and energy concerned with single-employer plans which it insures and much less time with multi-employer plans to which it provides loans when necessary.<sup>37</sup>

The first component of the PBGC system is its termination structure. Initially, ERISA allowed companies to opt-out whenever they wanted and hence transfer all of

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<sup>33</sup> *Id.*

<sup>34</sup> *Id.*

<sup>35</sup> *Id.*

<sup>36</sup> *Id.* at 8.

<sup>37</sup> *Id.*



their liabilities to the PBGC.<sup>38</sup> In 1987, Congress revised this system to create three potential mechanisms for plan termination which are in place today. The standard termination mechanism allows companies to voluntarily terminate their plans only if plan assets exceed plan liabilities.<sup>39</sup> The PBGC is thus not responsible for any of the companies' obligations under those plans. Additionally, if a company terminates voluntarily with a surplus, the law imposes a 50 percent excise tax on the surplus to prevent plan termination as a method of accessing funding surpluses.<sup>40</sup> Distress termination is permitted if the company meets one of three criteria: it is petitioning for bankruptcy or insolvency; it is unable to pay its debts when due and will be unable to continue business without termination; the cost of the plan has become unreasonably burdensome because of a decline in the company's workforce.<sup>41</sup> Finally, the PBGC can force involuntary terminations in four potential circumstances: the company does not meet minimum funding requirements; the company can not pay its benefits when due; a lump-sum is paid to a person who is a substantial owner of the company; an eventual loss to the PBGC would be unreasonable if the plan is not terminated.<sup>42</sup>

In order to fund the PBGC, ERISA initially required companies to pay a \$1 per participant per year premium (the basic premium).<sup>43</sup> The basic premium was increased to \$19 per participant per year in 1991 where it has stayed since.<sup>44</sup> The Pension Protection Act of 1987 added a second tier premium (the variable premium) for plans with unfunded vested benefits which was initially set at \$6 for each \$1,000 of unfunded vested benefits

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<sup>38</sup> 26 U.S.C. § 4041(a) (2006); 29 U.S.C. § 1341(a) (2006).

<sup>39</sup> 26 U.S.C. § 4041(b) (2006); 29 U.S.C. § 1341(b) (2006).

<sup>40</sup> Kennedy, *supra* note 1, at 915.

<sup>41</sup> 26 U.S.C. § 4041(c)(2)(B) (2006); 29 U.S.C. § 1341(c)(2)(B) (2006).

<sup>42</sup> GUIDE TO UNDERSTANDING, *supra* note 6, at 10.

<sup>43</sup> *Id.* at 8.

<sup>44</sup> *Id.*

with a cap of \$50.<sup>45</sup> In 1994, Congress removed the cap and changed the variable requirement to \$9 for each \$1,000 of unfunded vested benefits.<sup>46</sup> Therefore, today's system requires a \$19 per participant per year premium to the PBGC and a variable rate of 0.9 percent for unfunded vested benefits with no cap.<sup>47</sup> If an employer does not meet its premium obligations to the PBGC, the PGBC can place a lien on the employer's assets.<sup>48</sup>

Aside from the premiums it collects from employers, the PBGC also acquires assets from terminated plans. The premiums are on-budget revenues and must be invested in fixed-income securities.<sup>49</sup> On the other hand, terminated assets are part of the off-budget PBGC trust fund which can be invested in a number of different areas.<sup>50</sup> The relationship between these PBGC and the Federal Budget can be seen in Figure 1. While the PBGC itself is not backed by the full faith and credit of the Federal Government, it does have a \$100 million of credit from the United States Treasury.<sup>51</sup> Finally, it is important to note the PBGC does not pay out all employer provided benefits. Instead, it pays out almost all pension benefits anticipated by employer plans up to a maximum amount that varies by year.<sup>52</sup> In 2005, the maximum PBGC award was a \$45,614 life time annuity beginning at age 65.<sup>53</sup>

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<sup>45</sup> 26 U.S.C. § 4006(a)(3)(E)(iii)(V) (2006); 29 U.S.C. § 1306(a)(3)(E)(iii)(V) (2006).

<sup>46</sup> GUIDE TO UNDERSTANDING, *supra* note 6, at 8.

<sup>47</sup> *Id.*

<sup>48</sup> *Id.* at 3.

<sup>49</sup> *Id.* at 11.

<sup>50</sup> *Id.*

<sup>51</sup> *Id.*

<sup>52</sup> *Id.* at 12.

<sup>53</sup> *Id.*

## II. CASH FLOW ACCOUNTING

### A. Introduction

While there have always been PBGC funding issues lurking, these issues began to gain some degree of prominence in the early 2000s. During the 1990s, strong equity markets inflated the value of pension plan assets around the country and thus reduced the required minimum contributions.<sup>54</sup> Unfortunately, this meant that the bubble burst of the early 2000s reduced plan assets while at the same time reducing the interest rates used for funding purposes causing massive underfunding in plans across the country.<sup>55</sup> This confluence of events has been dubbed the “perfect storm”.<sup>56</sup> As a result, the PBGC found itself facing a large number of underfunded plans without the financial reserves necessary to provide relief should many of the plan obligations end up on the PBGC’s doorstep.

While this situation did not immediately alter the PBGC’s cash flow statements, it did have an effect and it certainly focused greater attention on the PBGC’s finances. Despite the fact that there are many potential problems with the PBGC and similarly many reforms being debated, the rest of this paper will focus on the current and future financial health of the PBGC itself. The primary vehicle used for measuring the health of the PBGC has been cash flow accounting. The impetus for using cash flow accounting is that it is the vehicle through which the entire federal budget is viewed.

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<sup>54</sup> Kathryn J. Kennedy, *Pension Funding Reform: It’s Time to Get the Rules Right (Part 2)*, TAX NOTES, Aug. 29, 2005, at 1040.

<sup>55</sup> *Id.*

<sup>56</sup> Polaroid Pension Plan in *The Pension Underfunding Crisis: How Effective Reforms Have Been?: Hearing before the Committee on education and the Workforce, US House of Representatives, 108<sup>th</sup> Cong., 1<sup>st</sup> Sess. (October 29, 2003)*, Statement of Robert D. Krinsky on behalf of American Benefits Council.

## B. Past and Current Estimates

A cash flow model compares the system's annual receipts to its annual payments. In the case of the PBGC, the receipts primarily include annual premiums and terminated assets and the payments primarily include administrative expenses and benefits paid. Determining the precise cash flow model for the PBGC raises some complexities. Since the program has both an on-budget and off-budget component, it is possible to create a solely on-budget cash flow model as well as a unified model. Since both models provide different uses and have been maintained by different organizations, this paper discusses both models.

The first model, an on-budget model, uses historical and current cash flow data for the PBGC available in the President's Budget, released by the Office of Management and Budget each year.<sup>57</sup> This data provides the best form of on-budget data since it is the basis for what is used to compute the federal budget each year. The premiums the PBGC receives each year are on-budget while the assets the PBGC receives from terminated plans are part of the PBGC's trust fund which is off-budget. Each year there are transfers made from the trust fund to finance the benefits paid out by the PBGC. In that sense, the on-budget PBGC cash flows reflect the yearly income and expenditures of the PBGC on plan beneficiaries.

Table 1 and Figure 2 provide useful summaries of the PBGC's historical on-budget yearly cash flows. Table 1 shows the PBGC's cash flow statements for fiscal years 2000 through 2005. The annual PBGC income comes in large part from the fixed and variable premiums paid by covered pension plans each year. The payments received

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<sup>57</sup> GUIDE TO UNDERSTANDING, *supra* note 6, at 17; BUDGET OF THE UNITED STATES GOVERNMENT: APPENDIX (various years) [hereinafter BUDGET OF THE UNITED STATES GOVERNMENT].

from non-budgetary accounts along with the other forms of income are essentially transfers made each year from the trust fund component of the PBGC which pay for benefit payments made to individuals covered by terminated plans as well as other service costs associated with plan termination. Finally, a good amount of income comes from the interest obtained by investing the on-budget surplus in fixed-income instruments. The yearly expenditures come from benefit payments to individuals covered by terminated plans as well as administrative expenses.

Table 1 and Figure 2 both indicate that the PBGC has generally had positive cash flow over the past 10 years, although in both 2003 and 2005 the PBGC's on-budget expenditures exceeded its income. The effect of the yearly cash flows on the on-budget PBGC assets is reflected in Table 1. As expected, when the PBGC is running large yearly cash flow surpluses its on-budget assets increase substantially but by the beginning of the 2000s with small positive and occasionally negative cash flows, the PBGC's on-budget assets begin to decline.

Table 2 provides unified cash flow accounting for the PBGC. This data comes from the PBGC itself and not from OMB.<sup>58</sup> As a result, some seemingly similar categories of income and expenses do differ under the two different accounting models. Some of these differences come from the fact that the PBGC numbers incorporate income and expenditures for both the on-budget and off-budget accounts. The income for the unified accounts are generally similar although there are not transfers from the off-budget

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<sup>58</sup> CENTER ON FEDERAL FINANCIAL INSTITUTIONS, *PBGC: WHEN WILL THE CASH RUN OUT?* (2004), available at <http://www.coffi.org/pubs/PBGC%20When%20Will%20the%20Cash%20Run%20Out%20v8.pdf> [hereinafter *WHEN WILL THE CASH RUN OUT*]; PENSION BENEFIT GUARANTEE CORPORATION, 2004 ANNUAL REPORT (2004), available at [http://www.pbgc.gov/docs/2004\\_annual\\_report.pdf](http://www.pbgc.gov/docs/2004_annual_report.pdf) [hereinafter 2004 ANNUAL REPORT].

accounts to be concerned with. The premiums are the same as in the on-budget model, however, the investment income differs. This income contains more than the interest from the on-budget fixed-income instruments as it also involves the income and yearly profits from the investment of the off-budget surplus in a variety of investment instruments, including equities. The final major component of income in the unified account are the assets gained from terminated plans. The expenditures contain the same benefit payments for the single and multi-employer systems as well as administrative expenses which now include expenses for the management of the off-budget surplus.

Table 2, Figure 3, and Figure 4 reveal that while income has generally exceeded expenditures over the period, it was not until the last few years that the gap has been significant. Both Table 2 and Figure 4 include two different ways of measuring the PBGC's unified assets. The cash and cash equivalent measure only includes surplus cash and cash equivalent investments (fixed-income instruments that are not subject to equity volatility as well as yearly cash profits taken out of equity investments). The overall asset line includes all of the PBGC's investments, whether in fixed-income or equity instruments. These two lines are augmented by the relevant changes in either cash equivalents or overall investments. The large increase in income in both lines is being driven almost entirely by increasing returns to equity investments reflected in cash profits amassed each year as well as the growing value of the equity investments themselves. This fact is confirmed in Figure 4 which shows the unified PBGC assets growing fairly rapidly. In short, these historical and current cash flow estimates paint a fairly rosy picture of the PBGC's financial health.

## B. Future Estimates

While interesting and necessary, past cash flow statements only hint at the larger problem facing the PBGC: declining revenue in the face of mounting expenses. Similar to Social Security, the question is when, not if, the PBGC will begin running consistent cash flow deficits and ultimately deplete its assets. Of course, the particular dates at which both of these events occur depend largely on the particular model used. Currently, there are two working models of the PBGC's long-term cash flows. They are provided by the Congressional Budget Office ("CBO") and the Center on Federal Financial Institutions ("COFFI"). These models also correspond to the on-budget and unified cash flow models.

The CBO model predicts the PBGC's on-budget cash flows 10-years into the future using current law assumptions.<sup>59</sup> The model derives its estimates of PBGC expenses, including benefits to be paid, from the CBO's most recent 10-year budgetary projections.<sup>60</sup> The CBO projects that the benefits paid will grow from about \$4 billion in 2005 to about \$10 billion in 2015.<sup>61</sup> As Table 3 indicates, according to these projections, the PBGC will exhaust its on-budget surpluses around 2013 at which point the PBGC will have to dramatically increase the amount of benefits it pays out from its trust fund surpluses.<sup>62</sup> While plan terminations increase the trust fund surpluses in the short-term, this is a misleading indicator of the PBGC's health because with those surpluses come larger future obligations. Figure 5 shows the on-budget trends in cash flows from 2000 to 2015. However, the starkest example of the change in overall fiscal health of the PBGC's

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<sup>59</sup> GUIDE TO UNDERSTANDING, *supra* note 6, at 16.

<sup>60</sup> *Id.*

<sup>61</sup> *Id.* at 18.

<sup>62</sup> *Id.* at 17.

on-budget funds come from Figure 6 which shows a shrinking and eventually non-existent surplus.

The COFFI model differs significantly from the CBO model in a number of respects. First, it uses a different notion of cash flows and focuses on both the on-budget and off-budget PBGC surplus.<sup>63</sup> It also focuses on a much longer time-horizon: 75 years.<sup>64</sup> However, the model is similar to CBO's in that it assumes current law.<sup>65</sup> These current law assumptions are augmented by particular economic assumption that generally mirror those made by the PBGC in its own long-term modeling.<sup>66</sup> In COFFI's most recent model, under the base case, the overall PBGC funds run out between 2020 and 2021.<sup>67</sup> COFFI also runs a few different scenarios under which base claims are cut in half and under which all airlines are assumed to shed their pension obligations. None of these scenarios significantly alter the results.<sup>68</sup>

Putting the CBO and COFFI models together it is not unrealistic to expect that under current law, the PBGC's on-budget funds will be exhausted in about 2013 and that its off-budget funds will be exhausted in about 2020, leaving the PBGC itself in bankrupt and in need of a bailout.

### **III. ACCRUAL ACCOUNTING**

#### **A. Introduction**

Accrual accounting provides an alternative way of evaluating the financial health of the PBGC. Accrual accounting has been primarily applied to Social Security in the

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<sup>63</sup> WHEN WILL THE CASH RUN OUT, *supra* note 58, at 5.

<sup>64</sup> *Id.* at 1.

<sup>65</sup> *Id.*

<sup>66</sup> *Id.*

<sup>67</sup> CENTER ON FEDERAL FINANCIAL INSTITUTIONS, PBGC: UPDATED CASH FLOW MODEL FROM COFFI (2004), *available at*

<http://www.coffi.org/pubs/PBGC%20Updated%20Cash%20Flow%20Model%20from%20COFFI.pdf>;

<sup>68</sup> *Id.*



past.<sup>69</sup> The essence of accrual accounting is evaluating the net financial position of a system by comparing the system's assets to the present value of its liabilities.<sup>70</sup> In the PBGC context, assets include the present value of all cash, equities, bonds and other holdings in the on-budget revolving fund as well as the off-budget trust fund while liabilities include the present value of all future benefits the PBGC is obligated to pay on behalf of terminated plans, those pending termination and those likely to terminate.<sup>71</sup>

Before plunging into past, current and future estimates of the PBGC's net financial position, it is important to highlight three conceptual issues that must be kept in mind in evaluating any of these estimates. The first issue mirrors one presented in the Social Security context: which retirees are included in liability calculations. One might include a combination of current retirees, workers in mid-career and future workers.<sup>72</sup> The second issue, also similar to a problem in the Social Security context, is whether or not to include future employer premium contributions.<sup>73</sup> This only differs from the Social Security context in that there are no worker contributions. Finally, there is an issue of how to predict which pension plans will terminate. In contrast to Social Security, where once a worker enters the labor force and begins paying payroll taxes the system is necessarily obligated to pay the worker some level of future Social Security benefit, in the PBGC context the system only becomes responsible for the worker once the plan terminates. This not only complicates the liabilities side of the equation but also the assets side as plan terminations provide the entirety of the PBGC's off-budget assets.

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<sup>69</sup> See Howell E. Jackson, *Accounting for Social Security and Its Reforms*, 41 J. LEGIS. 1, 59–159 (2004).

<sup>70</sup> GUIDE TO UNDERSTANDING, *supra* note 6, at 14.

<sup>71</sup> *Id.*

<sup>72</sup> Jackson, *supra* note 69, at 102.

<sup>73</sup> *Id.* at 120.

While there are no correct answers to these questions, it is important to keep them in mind as one evaluates various forms of accrual accounting.

### **A. Past and Current Estimates**

The PBGC itself provides comprehensive accrual accounting for the entire system.<sup>74</sup> Table 4 and Figure 7 provide summaries of the PBGC's accrual accounting from 1985 to 2004. Before drawing any conclusions from these summaries, it is important to delve deeper into how the assets and liabilities are defined by the PBGC. The assets include the cash and cash equivalents mentioned in the unified cash flow accounting section as well as the value of all of the PBGC investments. These investments include fixed maturity securities, equity securities, real estate investments and other forms of investment.<sup>75</sup> The PBGC also has assets in the form of receivables which are composed of obligations to the PBGC including unpaid pensions, corresponding penalties and other financial obligations to the PBGC.<sup>76</sup> It is important to note here that the PBGC does not include the value of future premiums and thus in some sense might undervalue its assets.

In terms of liabilities, the present value of future benefits is the PBGC's primary liability. The present value of future benefits is estimated by taking the anticipated benefit obligations less the expected value of plan assets when they enter into PBGC's trusteeship.<sup>77</sup> The expected benefit obligations are calculated using PBGC's interest rate and mortality tables in conjunction with the expected retirement age.<sup>78</sup> Importantly, this

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<sup>74</sup> PENSION BENEFIT GUARANTEE CORPORATION, PENSION INSURANCE DATABOOK 2004 (2004), available at <http://www.pbgc.gov/docs/2004databook.pdf> [hereinafter DATABOOK 2004].

<sup>75</sup> 2004 ANNUAL REPORT, *supra* note 58, at 20.

<sup>76</sup> *Id.*

<sup>77</sup> *Id.* at 30-31.

<sup>78</sup> *Id.*

includes not only current retirees but also present and future workers through the time horizon. In estimating its future obligations the PBGC focuses on “probable terminations” which are determined at the PBGC’s discretion based upon its primary knowledge of the state of each pension plan.<sup>79</sup> At bottom, this measure includes the costs from already terminated plans and those probable near-term terminations, but excludes new claims likely to arise in the future.<sup>80</sup> The PBGC also provides a less conservative estimate of plan terminations which are reported each year, although they are not included in the overall estimates. In 2005, the PBGC reported probable terminations of about \$10.5 billion and possible termination of \$108 billion.<sup>81</sup> These assumptions answer the question of how the PBGC predicts which programs are likely to terminate in calculating its liabilities. The rest of the PBGC’s liabilities are derived from the multi-employer plan as well as from smaller accounting adjustments.<sup>82</sup>

With those specifics in mind, Table 4 and Figure 7 have a more particularized meaning. As those summaries reveal, the net financial position of the PBGC has declined rapidly in recent years from its historical average. This is primarily the result of the “perfect storm”. In some sense, this calls into question the PBGC’s methodology. Perhaps, the PBGC’s assumptions about probable terminations were too conservative and it underestimated the potential problems many of the pension plans face. While plausible, a more generous interpretation, and one that is providing the basis for much current

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<sup>79</sup> *Id.*

<sup>80</sup> CONG. BUDGET OFFICE, THE RISK EXPOSURE OF THE PENSION BENEFIT GUARANTEE CORPORATION 4 (2005), available at <http://www.cbo.gov/ftpdocs/66xx/doc6646/09-15-PBGC.pdf> [hereinafter RISK EXPOSURE].

<sup>81</sup> PENSION BENEFIT GUARANTEE CORPORATION, PERFORMANCE AND ACCOUNTABILITY REPORT, FISCAL YEAR 2005 22 (2005), available at <http://www.pbgc.gov/docs/2005par.pdf>.

<sup>82</sup> 2004 ANNUAL REPORT, *supra* note 58, at 20.

policy debate, is that the PBGC system itself is poorly designed and so it does not capitalize on good times by bolstering the system.

## **B. Future Estimates**

While in some sense accrual accounting attempts to capture the future obligations of the system, these methods do not focus primarily on mapping out the relevant future assumptions necessary to get a full picture of the system's long-term financial condition. As a result, there have been a few efforts to model the long-term net financial position of the PBGC system. The two major models in this area are the PBGC's own model as well as the CBO's model. Both of these models only focus on the PBGC's single-employer program which represents the overwhelming majority of the PBGC's obligations.

The PBGC administration predicts the long-term financial health of the PBGC using the Pension Insurance Modeling System ("PIMS"). PIMS takes advantage of the PBGC's primary database which includes the financial condition of 400 pension plans covered by the PBGC.<sup>83</sup> The model then runs 5,000 different scenarios with all manner of economic assumptions.<sup>84</sup> Unfortunately, the PBGC does not publish a year by year breakdown of its results and it only publishes a limited number of summary statistics. The simulations produce a median value of \$1.7 billion per year in additional claims over the next ten years.<sup>85</sup> This translates into a median financial deficit of \$26.9 billion in 2014.<sup>86</sup> This model uses the same general assumptions about the workers included, the future benefits paid, and the likelihood of future terminations as the general PBGC accrual accounting model, however, the variation in economic assumptions in the model

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<sup>83</sup> *Id.* at 12.

<sup>84</sup> *Id.*

<sup>85</sup> *Id.*

<sup>86</sup> *Id.*

create a variety of different overall outcomes. While the predicted deficit of \$26.9 billion is only about a \$3 billion increase over the current deficit, it is important to remember both that the magnitude of this structural deficit is large and that in half of the simulations the deficit is actually greater.

The CBO also recently generated a model and report that estimates the PBGC's net financial liability.<sup>87</sup> The CBO model estimates how much a private insurer would be willing to pay to assume the PBGC's obligations over a 10-year, 15-year, and 20-year time horizon.<sup>88</sup> Using information on pension plans' assets and liabilities, benefit obligations and projected premium payments to the PBGC, the CBO computes the probabilities of insurance losses to the PBGC over each time period.<sup>89</sup> The present value of those expected losses is the cost of the PBGC insurance and hence what the government should expect to pay.<sup>90</sup> Importantly, all of these calculations depend on a particular set of economic assumptions.<sup>91</sup>

Table 5 provides a summary of the CBO model's results. Immediately, it is clear that the model predicts a much worse financial position for the PBGC than the PIMS model: a deficit of \$63.4 billion compared to \$26.9 billion in 2014. While some of this difference may be accounted for by differing primary data sets and economic assumptions, most of it comes from the CBO's more expansive assumption about the number of companies that are likely to terminate their plans over the next ten years.<sup>92</sup> As for other important conceptual issues mentioned above, CBO assumes that the same ratio

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<sup>87</sup> RISK EXPOSURE, *supra* note 89.

<sup>88</sup> *Id.* at 7.

<sup>89</sup> *Id.*

<sup>90</sup> *Id.*

<sup>91</sup> *Id.* at 19-20.

<sup>92</sup> *Id.* at 12.

of current workers to retired workers exists in each pension plan and hence that the increasing present value of vested benefits for workers as they near retirement offsets the falling present value of benefits for retirees as they age.<sup>93</sup> Along those lines, the CBO model also assumes a constant number of participants and hence premium contributions over time.<sup>94</sup>

While the PIMS model and the CBO model do not precisely agree, they, along with current and historical models of accrual accounting, position the financial health of the PBGC in the context of long-term liabilities as opposed to the present day focus of cash flow models.

#### **IV. WHY ACCRUAL ACCOUNTING FOR THE PBGC**

##### **A. INTRODUCTION**

Accrual accounting provides an alternative to cash flow accounting and can yield additional useful insights in many budgetary contexts. Given the previous discussion of the relevant legal regime and various cash flow and accrual accounting estimates of the PBGC's financial health, it is worth exploring some preliminary arguments for applying accrual accounting in the PBGC context. Using accrual accounting in the PBGC context provides a better picture of both the PBGC and the overall federal budget.

##### **B. PBGC CONTEXT**

At first blush, a review of any PBGC or other related document demonstrates that accrual accounting is the preferred method of pension accounting. As discussed in the legal section, pension plans themselves hire actuaries to estimate their net financial

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<sup>93</sup> *Id.* at 24.

<sup>94</sup> *Id.*

position in accrual accounting terms.<sup>95</sup> Along those lines, one of the primary purposes of the passage of ERISA was to require a long-term funding focus by pension plans. This advanced funding approach demonstrates a rejection of the pay-as-you-go approach to pensions. Furthermore, the PGGC's Annual Report focuses primarily on accrual accounting measures of its fiscal health.<sup>96</sup> This is also true of the PIMS model, which is the only long-term accounting modeling done by the PBGC.<sup>97</sup>

In addition to the use of accrual accounting in relevant pension plan and PBGC official documentation, accrual accounting provides a more coherent method of understanding the PBGC's financial position. Cash flow accounting in the PBGC context raises needless complexities that result from the difference in the on-budget and off-budget components of the program. To the extent that one is interested in the overall health of the pension system and in particular the PBGC, focusing on accounting that is concerned with transfers between different components of the PBGC obscures the important overall questions. Similarly, the concept of a trust fund is misleading as in reality under cash flow analysis credits to and debits from the trust fund each year are no different than credits to and debits from the revolving fund each year.

While a unified cash flow analysis does resolve some part of these problems, since cash flow analyses are built around the overall federal budget the tendency is to only use on-budget cash flow accounting. Even a unified cash flow analysis sacrifices a complete picture of the long-run health of the PBGC for a short-term analysis. A cash flow analysis only reveals the state of the PBGC's assets in any given year while accrual accounting provides a picture of the overall health of the system by focusing on the long-

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<sup>95</sup> GUIDE TO UNDERSTANDING, *supra* note 6, at 14.

<sup>96</sup> 2004 ANNUAL REPORT, *supra* note 58.

<sup>97</sup> *Id.*

run obligations of the system. This is particularly relevant in the context of the trust fund where a plan termination in one year represents a sizable gain in cash flow for the fund but a larger increase in future benefit obligations. Only accrual accounting and not cash flow accounting represents these plan terminations as financial negatives for the PBGC. The foregoing analysis of the different cash flow and accrual accounting measures demonstrates the differences in the approaches. A current cash flow accounting model shows a rosy picture for the PBGC's finances while an accrual accounting model already shows the PBGC in a net negative financial position.

### **C. FEDERAL BUDGET CONTEXT**

In addition to being beneficial for the PBGC, accrual accounting in the PBGC context provides a more complete picture of the entire federal budget. The federal budget as depicted by the PBGC focuses only on the PBGC's on-budget funds. This provides misleading budgetary figures for a number of reasons. In a most basic sense, this simply excludes a whole set of income and expenses derived from the off-budget PBGC assets.<sup>98</sup> Additionally, the PBGC is shown as a net cash inflow to the federal budget because its on-budget income exceeds its expenses. In some sense, this makes the PBGC's premiums a yearly revenue generator for the federal budget when those premiums are meant conceptually to finance future benefit payments. For example, the 2004 federal budget credited the PBGC with a net cash surplus of \$247 million even though it assumed more than \$3 billion in new liabilities as the result of a number of airline bankruptcies.<sup>99</sup>

While these facts do make a solid argument for using accrual accounting for the PBGC, the question of how to incorporate the PBGC into the overall federal budget

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<sup>98</sup> GUIDE TO UNDERSTANDING, *supra* note 6, at 14.

<sup>99</sup> RISK EXPOSURE, *supra* note 89, at 4.



remains a tricky one. Similar to the Social Security context, moving the entire PBGC structure off-budget would still mask the true financial picture of the federal budget.<sup>100</sup> Different from the Social Security context, however, the PBGC is not backed by the full faith and credit of the Federal Government and so in some ways it is much more plausible that the system will simply not pay out already accrued benefits. This fact means that while there may be a strong argument for viewing all of Social Security's liabilities as Federal Government liabilities, it is not clear that is true of the PBGC's liabilities. That said, it is clear that the current use of the PBGC as essentially a revenue generator for the federal budget cannot be justified.

## V. CONCLUSION

The history, structure and financial position of the PBGC demonstrate the need to be proactive in thinking about the PBGC's future and therefore the future of millions of pension plan participants. While there are a number of avenues for reform, many of which are currently being debated, these primarily structural reforms should be considered in both the cash flow and accrual accounting context. Focusing on both accounting contexts will allow reformers to better understand the effect of reforms on the long-term health of the pension system.

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<sup>100</sup> Jackson, *supra* note 69, at 102.

Figure 1  
The Budgetary Treatment of the PBGC

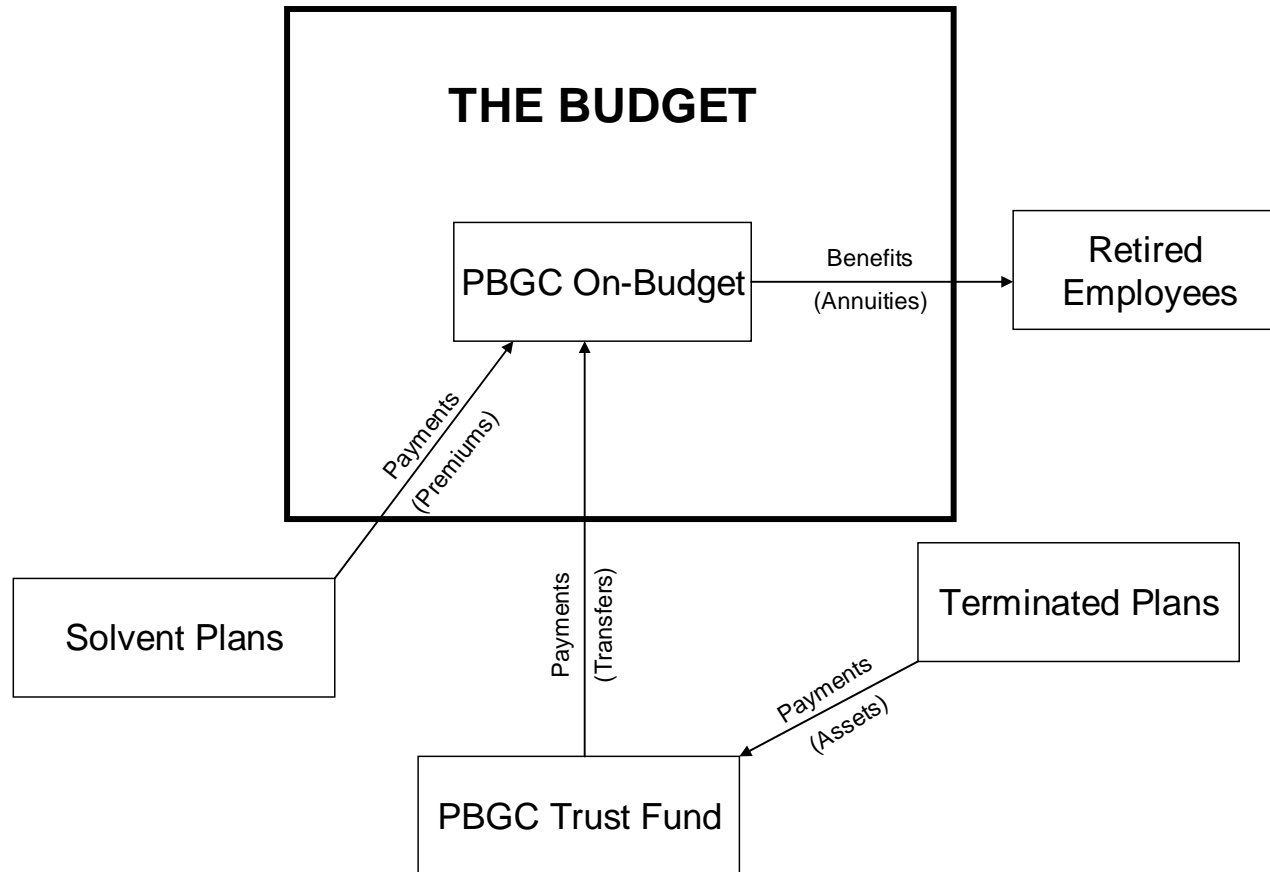
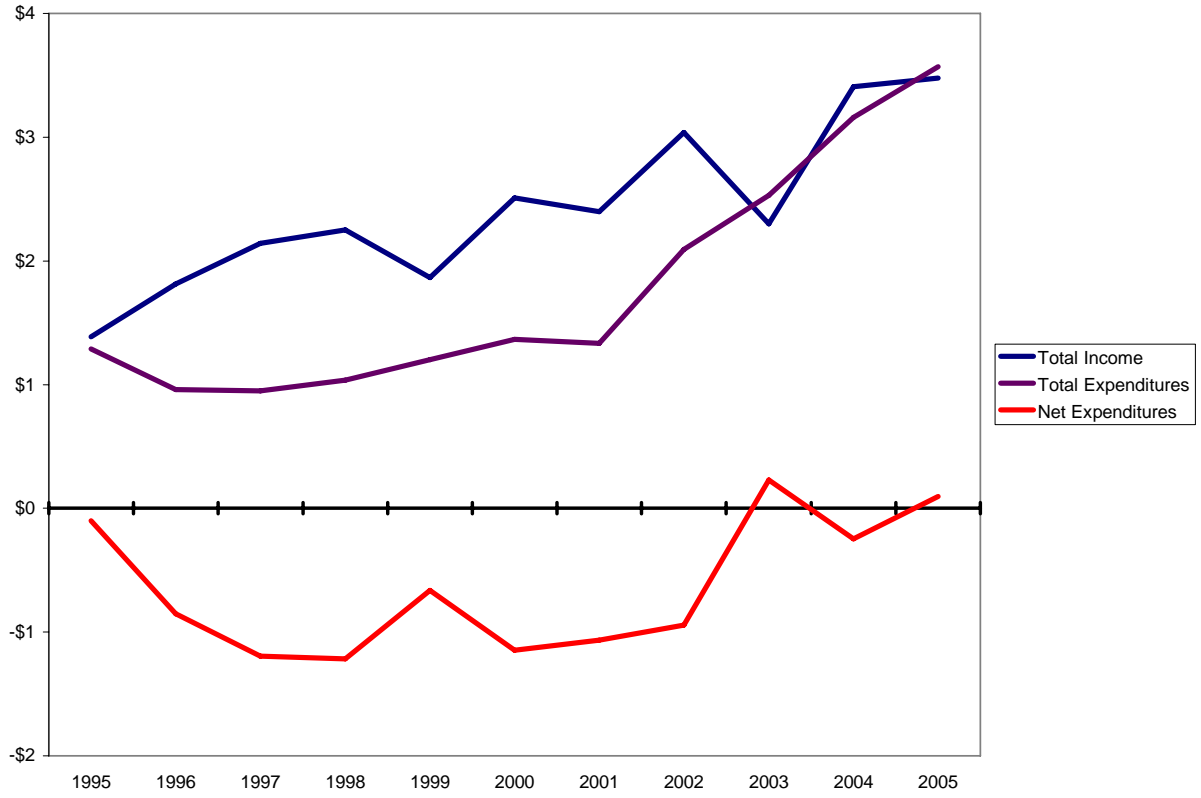


Table 1  
 Summary of PBGC's On-Budget Income and Expenditures, 2000-2005  
 (Millions of Dollars)<sup>101</sup>

<b>Income During Fiscal Year:</b>	2000	2001	2002	2003	2004	2005
Premiums	\$977	\$850	\$864	\$866	\$1,139	\$1,622
Payments Received From Non-Budgetary Accounts	\$596	\$946	\$1,493	\$624	\$1,063	\$897
Interest Credited to On-Budget Account	\$937	\$598	\$676	\$810	\$1,206	\$958
Other	\$0	\$4	\$5	\$0	\$0	\$0
<i>Total Income</i>	<i>\$2,510</i>	<i>\$2,398</i>	<i>\$3,038</i>	<i>\$2,300</i>	<i>\$3,408</i>	<i>\$3,477</i>
<b>Expenditures During Fiscal Year:</b>						
Benefit Payments and Financial Assistance	\$985	\$1,101	\$1,883	\$2,277	\$2,883	\$3,248
Administrative Expenses	\$380	\$232	\$210	\$252	\$278	\$323
<i>Total Expenditures</i>	<i>\$1,365</i>	<i>\$1,333</i>	<i>\$2,093</i>	<i>\$2,529</i>	<i>\$3,161</i>	<i>\$3,571</i>
<b>Net Increase in On-Budget Assets</b>	<b>\$1,145</b>	<b>\$1,065</b>	<b>\$945</b>	<b>-\$229</b>	<b>\$247</b>	<b>-\$94</b>
<b>Total On-Budget Assets</b>	<b>\$10,510</b>	<b>\$11,575</b>	<b>\$12,520</b>	<b>\$12,291</b>	<b>\$12,538</b>	<b>\$12,444</b>

<sup>101</sup> BUDGET OF THE UNITED STATES GOVERNMENT, *supra* note 57.

Figure 2  
PBGC's On-Budget Income and Expenditures, 1995-2005  
(Billions of Dollars)<sup>102</sup>



<sup>102</sup> *Id.*

Table 2  
 Unified Income and Expenditures, 2000-2004  
 (Millions of Dollars)<sup>103</sup>

<b>Income During Fiscal Year:</b>	2000	2001	2002	2003	2004	2005
Premiums	\$926	\$819	\$845	\$853	\$1,136	\$1,621
Investment Income	\$359	\$259	\$136	\$3,616	\$6,396	\$2,718
Cash Received From Plans Upon Trusteeship	\$32	\$592	\$662	\$360	\$51	\$218
Other Income	\$38	\$38	\$380	\$132	\$127	\$284
<i>Total Income</i>	\$1,355	\$1,708	\$2,023	\$4,961	\$7,710	\$4,841
<b>Expenditures During Fiscal Year:</b>						
Benefit Payments and Financial Assistance	\$987	\$1,032	\$1,488	\$2,160	\$2,899	\$3,302
Administrative and Other Expenses	\$362	\$347	\$609	\$340	\$285	\$329
<i>Total Expenditures</i>	\$1,349	\$1,379	\$2,097	\$2,500	\$3,184	\$3,631
<b>Net Increase in Cash and Cash Equivalent Assets</b>	\$6	\$329	-\$74	\$2,461	\$4,526	\$1,210
<b>Total Cash and Cash Equivalent Assets</b>	\$464	\$793	\$719	\$3,180	\$7,706	\$8,902
Change in Value of Investment Assets	\$2,324	\$386	\$4,052	\$5,954	-\$1,414	\$17,027
<b>Net Increase in Assets</b>	\$2,330	\$715	\$3,978	\$8,415	\$3,112	\$18,237
<b>Total Assets</b>	\$21,091	\$21,806	\$25,784	\$34,199	\$37,311	\$83,943

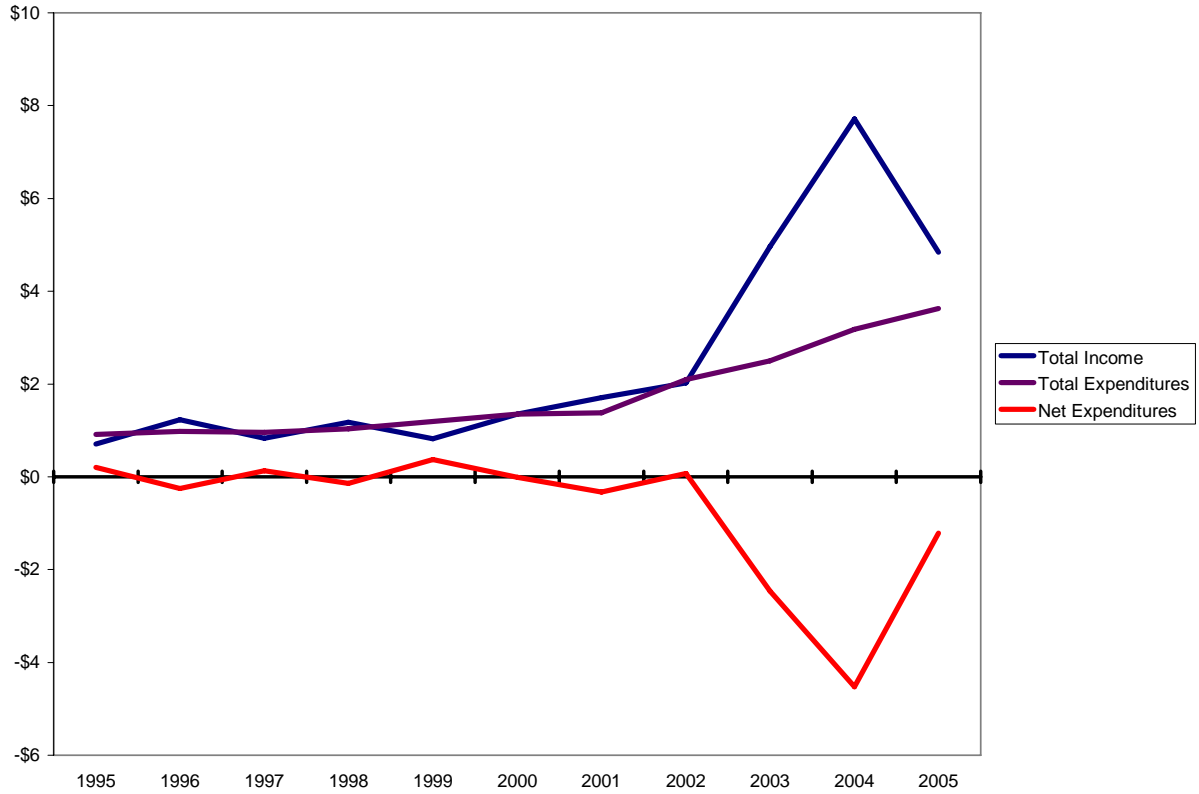
<sup>103</sup> 2004 ANNUAL REPORT, *supra* note 58.

Table 3  
CBO Model  
On-Budget Income and Expenditures, 2006-2015  
(Millions of Dollars)<sup>104</sup>

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
<b>Income During Fiscal Year:</b>										
Premiums	\$1,284	\$1,259	\$1,518	\$1,486	\$1,430	\$1,383	\$1,392	\$1,403	\$1,414	\$1,428
Payments Received From Non-Budgetary Accounts	\$2,882	\$3,174	\$3,530	\$3,921	\$4,258	\$4,607	\$4,989	\$6,387	\$8,687	\$9,123
Interest Credited to On-Budget Account	\$714	\$655	\$598	\$514	\$409	\$282	\$135	\$29	\$25	\$26
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<i>Total Income</i>	<i>\$4,880</i>	<i>\$5,088</i>	<i>\$5,646</i>	<i>\$5,921</i>	<i>\$6,097</i>	<i>\$6,272</i>	<i>\$6,516</i>	<i>\$7,819</i>	<i>\$10,126</i>	<i>\$10,577</i>
<b>Expenditures During Fiscal Year:</b>										
Benefit Payments and Financial Assistance	\$5,192	\$5,690	\$6,299	\$6,962	\$7,522	\$8,098	\$8,726	\$9,254	\$9,690	\$10,170
Administrative Expenses	\$441	\$455	\$472	\$487	\$489	\$486	\$480	\$463	\$436	\$407
<i>Total Expenditures</i>	<i>\$5,633</i>	<i>\$6,145</i>	<i>\$6,771</i>	<i>\$7,449</i>	<i>\$8,011</i>	<i>\$8,584</i>	<i>\$9,206</i>	<i>\$9,717</i>	<i>\$10,126</i>	<i>\$10,577</i>
<b>Net Increase in On-Budget Assets</b>	<b>-\$753</b>	<b>-\$1,057</b>	<b>-\$1,125</b>	<b>-\$1,528</b>	<b>-\$1,914</b>	<b>-\$2,312</b>	<b>-\$2,690</b>	<b>-\$1,898</b>	<b>\$0</b>	<b>\$0</b>
<b>Total On-Budget Assets</b>	<b>\$11,691</b>	<b>\$10,634</b>	<b>\$9,509</b>	<b>\$7,981</b>	<b>\$6,067</b>	<b>\$3,755</b>	<b>\$1,065</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

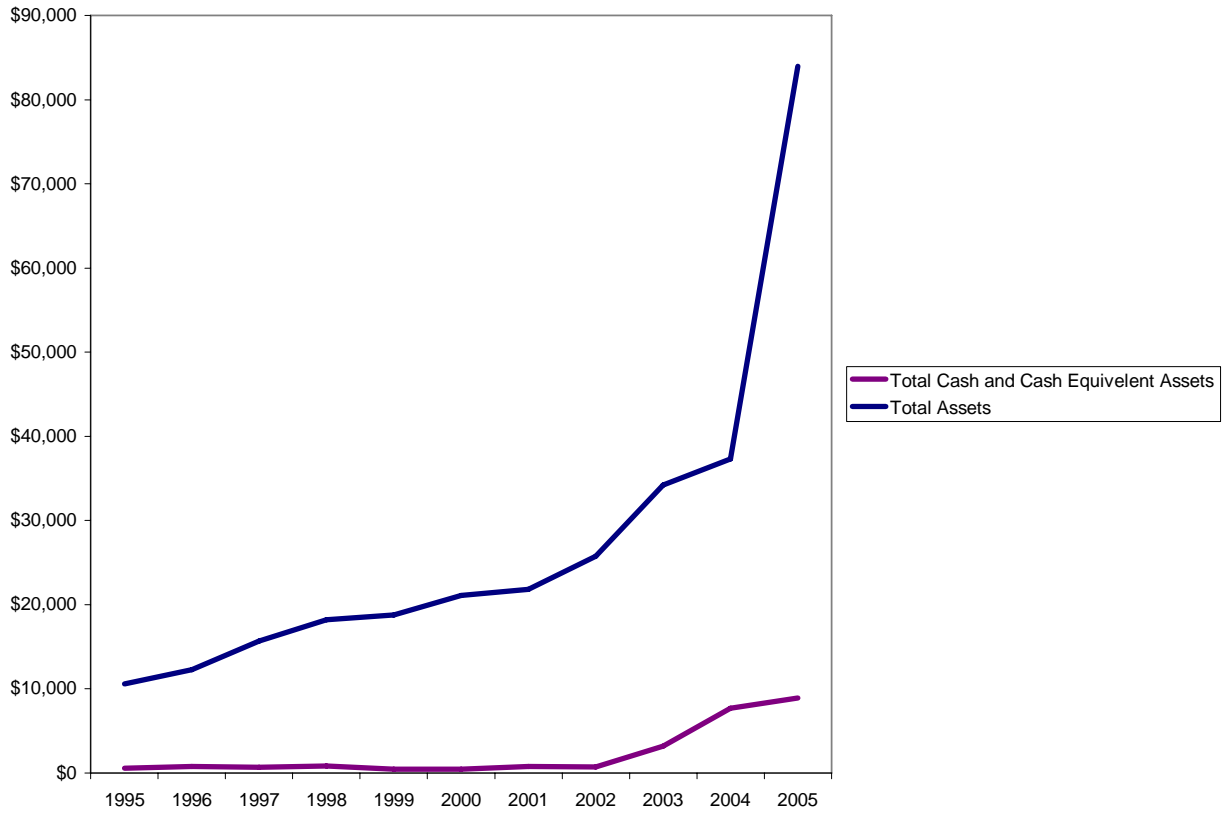
<sup>104</sup> GUIDE TO UNDERSTANDING, *supra* note 6.

Figure 3  
PBGC's Unified Income and Expenditures, 1995-2004  
(Billions of Dollars)<sup>105</sup>



<sup>105</sup> 2004 ANNUAL REPORT, *supra* note 58.

Figure 4  
PBGC's Unified Assets, 1995-2004  
(Millions of Dollars)<sup>106</sup>

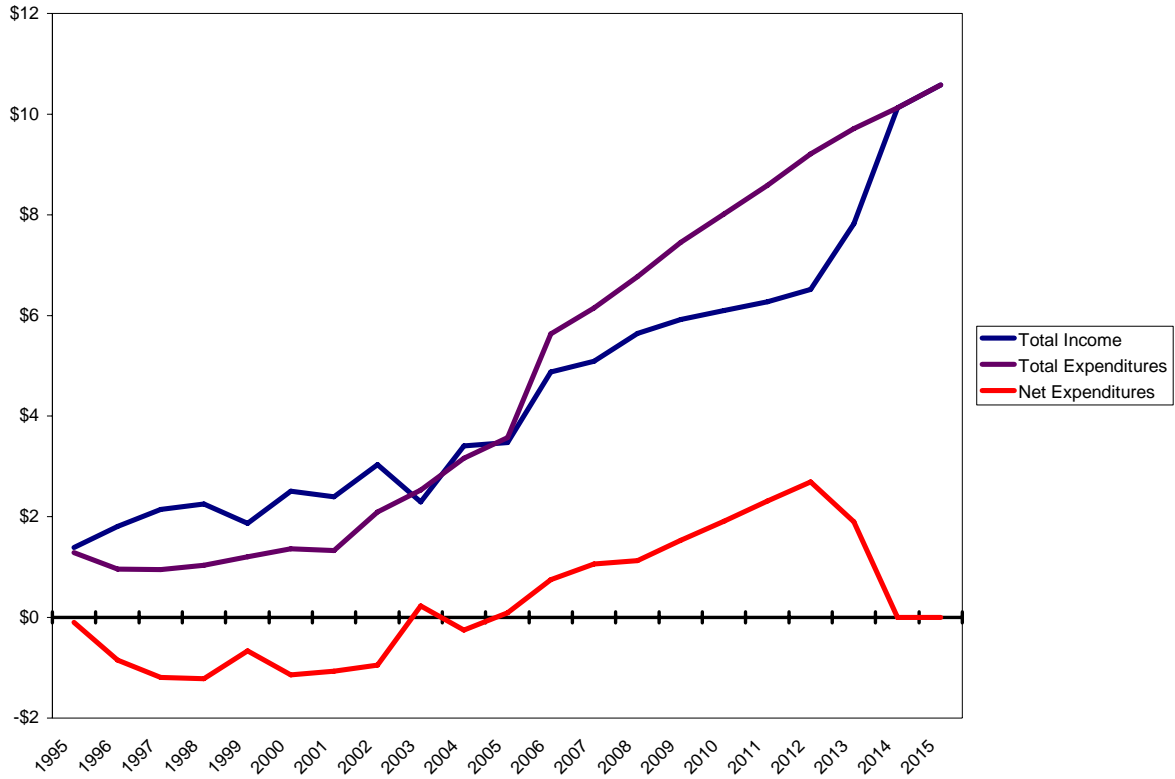


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<sup>106</sup> *Id.*

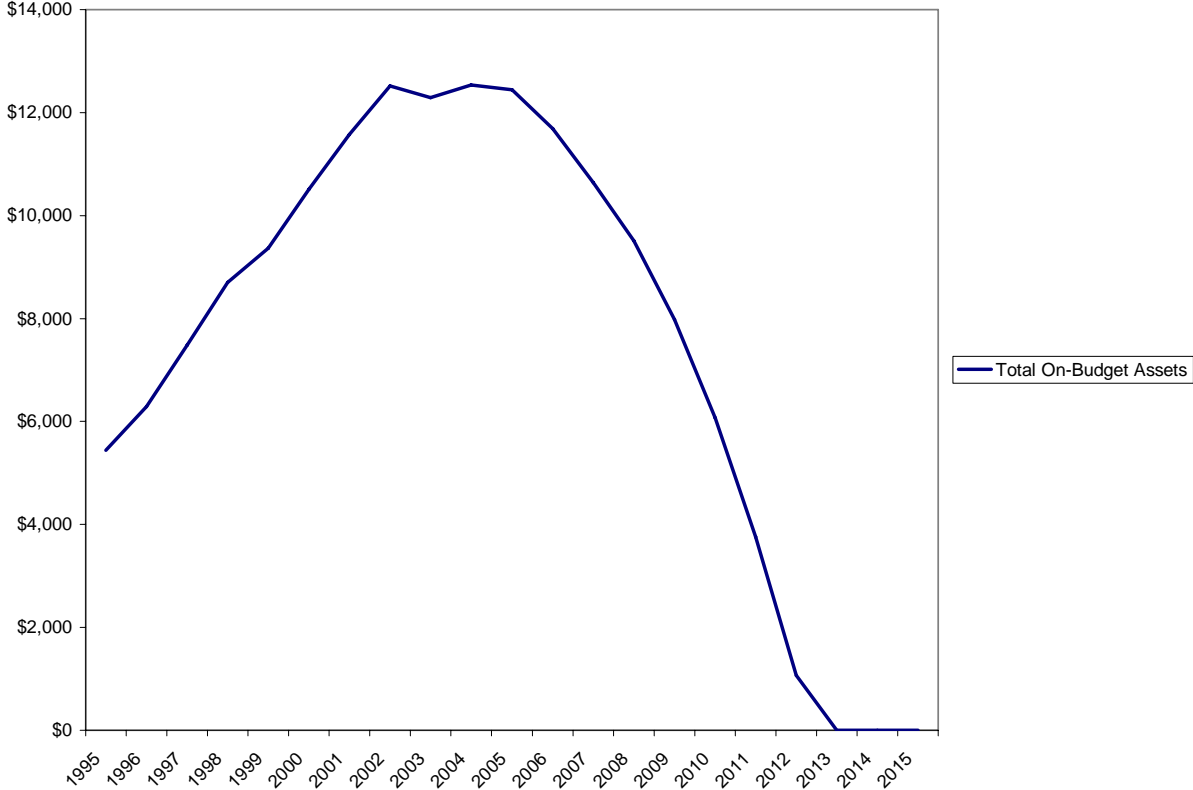


Figure 5  
 Historical Data and CBO Model  
 PBGC's Income and Expenditures, 1995-2015  
 (Billions of Dollars)<sup>107</sup>



<sup>107</sup> BUDGET OF THE UNITED STATES GOVERNMENT, *supra* note 57; GUIDE TO UNDERSTANDING, *supra* note 6.

Figure 6  
 Historical Data and CBO Model  
 PBGC's On-Budget Assets, 1995-2015  
 (Millions of Dollars)<sup>108</sup>



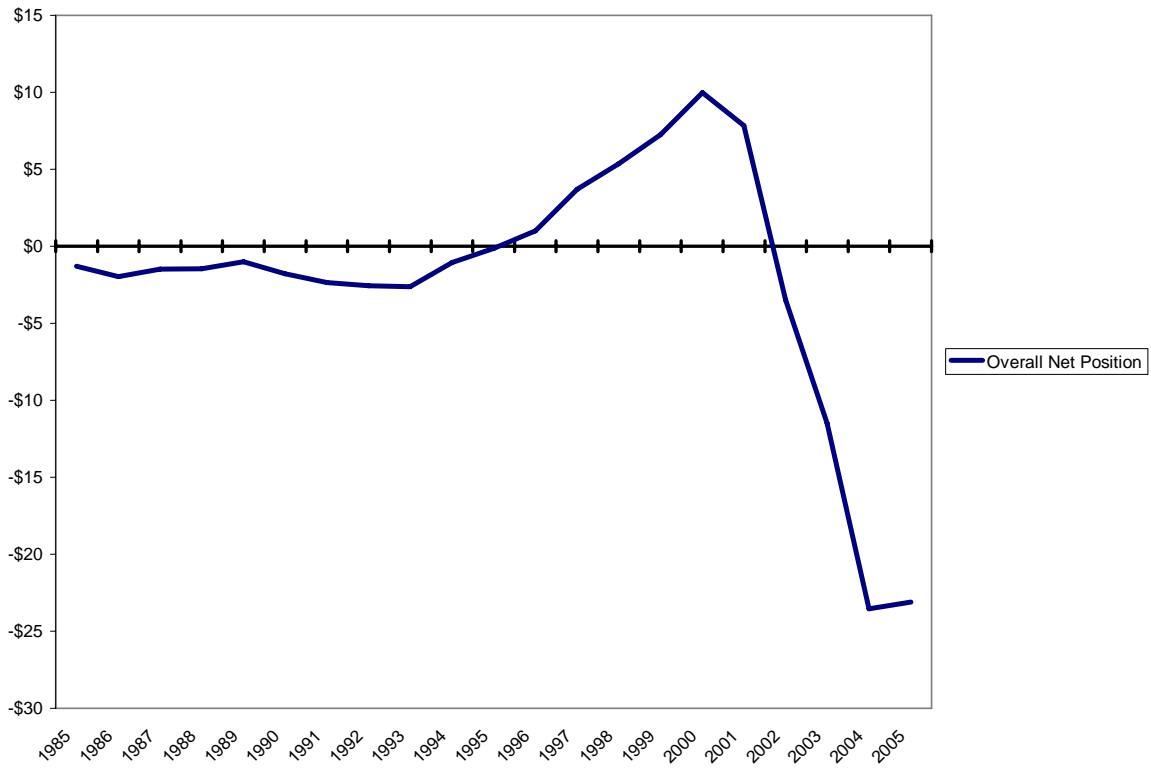
<sup>108</sup> BUDGET OF THE UNITED STATES GOVERNMENT, *supra* note 57; GUIDE TO UNDERSTANDING, *supra* note 6.

Table 4  
 PBGC's Accrual Accounting Statements, 2000-2004  
 (Millions of Dollars)<sup>109</sup>

	2000	2001	2002	2003	2004	2005
<b>Single-Employer Program</b>						
Total Assets	\$20,830	\$21,768	\$25,430	\$34,016	\$38,993	\$56,470
Total Liabilities	\$11,126	\$14,036	\$29,068	\$45,254	\$62,298	\$79,246
<b>Net Position</b>	\$9,704	\$7,732	-\$3,638	-\$11,238	-\$23,305	-\$22,776
<b>Multi-Employer Program</b>						
Total Assets	\$694	\$807	\$944	\$1,000	\$1,070	\$1,160
Present Value of Future Benefits and Nonrecoverable Financial Assistance	\$427	\$691	\$786	\$1,261	\$1,306	\$1,495
<b>Net Position</b>	\$267	\$116	\$158	-\$261	-\$236	-\$335
<b>Overall Net Position</b>	\$9,971	\$7,848	-\$3,480	-\$11,499	-\$23,541	-\$23,111

<sup>109</sup> DATABOOK 2004, *supra* note 74.

Figure 7  
PBGC's Overall Net Position, 1985-2004  
(Billions of Dollars)<sup>110</sup>



<sup>110</sup> *Id.*

Table 5  
 CBO Long-Term Net Position Model  
 PBGC Prospective Net Costs for Single-Employer Plans  
 (Billions of Dollars)<sup>111</sup>

	Market Value
10 Year (2014)	\$63
15 Year (2019)	\$96
20 Year (2024)	\$119

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<sup>111</sup> RISK EXPOSURE, *supra* note 89.

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