

# **Pension Benefit Guaranty Corporation** (**PBGC**) and Defined Benefit Pension Plan Funding Issues

**John J. Topoleski** Analyst in Income Security

June 25, 2012

The House Ways and Means Committee is making available this version of this Congressional Research Service (CRS) report, with the cover date shown, for inclusion in its 2012 Green Book website. CRS works exclusively for the United States Congress, providing policy and legal analysis to Committees and Members of both the House and Senate, regardless of party affiliation.

**Congressional Research Service** 95-118

# Summary

The Pension Benefit Guaranty Corporation (PBGC) is a federal government agency established in 1974 by the Employee Retirement Income Security Act (ERISA; P.L. 93-406). It was created to protect the pensions of participants and beneficiaries covered by private sector, *defined benefit* (DB) plans. These pension plans provide a specified monthly benefit at retirement, usually either a percentage of salary or a flat dollar amount multiplied by years of service. *Defined contribution* plans, such as §401(k) plans, are not insured. The PBGC is chaired by the Secretary of Labor, with the Secretaries of the Treasury and Commerce serving as board members.

The PBGC runs two distinct insurance programs for single-employer and multiemployer plans. Multiemployer plans are collectively bargained plans to which more than one company makes contributions. PBGC maintains separate reserve funds for each program. In FY2011, the PBGC insured about 27,066 DB pension plans covering 44.2 million people. The PBGC paid or owed benefits to 1.5 million people and took in 152 newly terminated pension plans. A firm must be in financial distress to end an underfunded plan. Most workers in single-employer plans taken over by PBGC receive the full benefit earned at the time of termination, but the ceiling on multiemployer plan benefits that could be guaranteed has left almost all of these retirees without full benefit protection.

In general, defined benefit pension plans are required to have sufficient funds from which to pay current and expected future benefits. Each year, plan sponsors are required to contribute the value of benefits earned by participants in that year and a portion of any prior years' underfunding, which is the amount by which the value of current and future benefits exceeds current plan assets. Changes by Congress to pension funding requirements and the economic recession that began in December 2007 and ended in June 2009 have caused required contributions to pension plans to increase in recent years. To improve pension plan funding, Congress passed the Pension Protection Act of 2006 (PPA, P.L. 109-280), which resulted in increases in the amount of required contributions to pension plans by plan sponsors. Two other factors have caused increases in required contributions: (1) investment losses experienced by pension plans in the 2008 stock market downturn, which lowered the value of plan assets, and (2) lower interest rates as a result of Federal Reserve actions to try to influence economic activity, which increased the value of future pension plan benefit obligations. In addition, the recession negatively affected company profits, which made required contributions to pensions more difficult to make.

In the 111<sup>th</sup> Congress, H.R. 3962, the Preservation of Access to Care for Medicare Beneficiaries and Pension Relief Act of 2010 (P.L. 111-192), provided defined benefit pension plans sponsors the opportunity to spread over a greater number of years than specified under then current law contributions to offset the losses which resulted from the stockmarket downturn in 2008. In the 112<sup>th</sup> Congress, the Senate approved an amendment offered by Senate Majority Leader Harry Reid to S. 1813, Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21), which contains provisions that would address the use of excess defined benefit pension plan assets and the interest rates that defined benefit plans use to value plan liabilities. Senate Majority Leader Harry Reid has proposed (1) using the pension-related provisions in S. 1813, as passed by the Senate on March 14, 2012, and (2) increasing the premiums that pension plan sponsors pay to PBGC as an offset for a one-year extension of current student loan interest rates.

# Contents

Pension Benefit Guaranty Corporation	. 1
PBGC Financing	. 1
Premiums	. 1
Pension Benefit Guaranty	. 1
Current Financial Picture	. 2
Defined Benefit Pension Funding	3
Funding Relief Enacted in the 111 <sup>th</sup> Congress	3
Single-Employer Funding Relief	
Certain Other Plans	4
Plans Run by Charities	. 5
Multiemployer plans	. 5
Funding Proposals in the 112 <sup>th</sup> Congress	
Proposals in S. 1813, Moving Ahead for Progress in the 21 <sup>st</sup> Century (MAP-21),	
as Passed by the Senate on March 14, 2012	6
Proposal to Use Segment Rate Stabilization and PBGC Premium Increases to	
Offset Freeze in Student Loan Interest Rates	11

## Figures

Figure 1. Hypothetical Application of Segment Rate Stabilization Provision as Found in	
S. 1813, as Passed by the Senate on March 14, 2012	9
Figure 2. Moody's Seasoned Aaa Corporate Bond Yields	11

## Tables

Table 1. PBGC Single and Multi-Employer Insurance Programs: Net Financial Position, FY2002 -FY2011	2
Table 2. Applicable Minimum and Maximum Interest Rate Percentages of 25 Year	
Averages for Pension Funding in S. 1813, as Passed by the Senate on March 14, 2012	10

## **Pension Benefit Guaranty Corporation**

The Pension Benefit Guaranty Corporation (PBGC) is a federal government agency established in 1974 by the Employee Retirement Income Security Act (ERISA; P.L. 93-406). It was created to protect the pensions of participants and beneficiaries covered by private sector, *defined benefit* (DB) plans. These pension plans provide a specified monthly benefit at retirement, usually either a percentage of salary or a flat dollar amount multiplied by years of service. *Defined contribution* plans, such as §401(k) plans, are not insured. The PBGC is chaired by the Secretary of Labor, with the Secretaries of the Treasury and Commerce serving as board members.

The PBGC runs two distinct insurance programs: single-employer and multiemployer plans. Multiemployer plans are collectively bargained plans to which more than one company makes contributions. The PBGC maintains separate reserve funds for each program. In FY2011, the PBGC insured about 27,066 DB pension plans covering 44.2 million people. It paid or owed benefits to 1.5 million people and took in 152 newly terminated pension plans. A firm must be in financial distress to end an underfunded plan. Most workers in single-employer plans taken over by the PBGC receive the full benefit earned at the time of termination, but the ceiling on multiemployer plan benefits that could be guaranteed has left almost all of these retirees without full benefit protection.

## **PBGC Financing**

The PBGC is required by ERISA to be self-supporting and receives no appropriations from general revenue. The most reliable source of PBGC revenue is the premiums set by Congress and paid by the private-sector employers that sponsor DB pension plans. Other sources of income are assets from terminated plans taken over by the PBGC, investment income, and recoveries collected from companies when they end underfunded pension plans. The PBGC is authorized to borrow up to \$100 million from the U.S. Treasury. P.L. 96-364 requires that the PBGC's receipts and disbursements be included in federal budget totals.

## Premiums

The minimum annual premium charged for each participant in a single-employer DB plan was raised for the 2006 plan year from \$19 to \$30 by the Deficit Reduction Act (DRA) of 2005 (P.L. 109-171). This law also raised the multiemployer plan premium from a flat \$2.60 annually per participant to \$8. Because these premiums are now adjusted for inflation, the 2012 rates will be \$35 and \$9, respectively. The DRA added a new \$1,250 per participant premium for certain plans terminated after 2005. This premium is payable for the year of termination and each of the next two years. An additional premium of \$9 for each \$1,000 of "unfunded vested benefits," as newly defined by the Pension Protection Act of 2006 (PPA; P.L. 109-280), is assessed against plans that are not fully funded. Effective in 2008, the PPA also eliminated certain exemptions from this variable premium.

### **Pension Benefit Guaranty**

ERISA sets a maximum on the individual benefit amount that the PBGC can guarantee. The ceiling for single-employer plans is adjusted annually for national wage growth. The maximum

pension guarantee is \$55,840 a year for workers aged 65 in plans that terminate in 2012. This amount is adjusted annually and is decreased if a participant retires before age 65 or if the pension plan provides benefits in some form other than equal monthly payments for the life of the retiree. Only "basic benefits" are guaranteed. These include benefits beginning at normal retirement age (usually 65), certain early retirement and disability benefits, and benefits for survivors of deceased plan participants. Only vested benefits are insured. The median monthly benefit received in FY2009 was \$305. In 2006, PBGC indicated that 84% of PBGC recipients received their full benefits.

In contrast, the ceiling on guaranteed benefits for multiemployer plans is not adjusted annually. The amount set in 1980 did not change until the Consolidated Appropriations Act, 2001 (P.L. 106-554) became law in December 2000. These plans determine benefits by multiplying a flat dollar rate by years of service, so the benefit guaranty ceiling is tied to this formula. The new ceiling equals 100% of the first \$11 of monthly benefits per year of service plus 75% of the next \$33 of monthly benefits per year of service.

### **Current Financial Picture**

**Table 1** provides information on the net financial position from FY2002 through FY2011. In 1996, the PBGC showed a surplus in its single-employer program for the first time in its history. That surplus peaked at \$9.7 billion in 2000, helped by the strong performance of the equity markets in the 1990s.

(billions of dollars)				
Fiscal Year	Single Employer Program	Multi-Employer Program	Total PBGC Deficit	
2002	-3.6	0.2	-3.5	
2003	-11.2	-0.3	-11.5	
2004	-23.3	-0.2	-23.5	
2005	-22.8	-0.3	-23.1	
2006	-18.1	-0.7	-18.9	
2007	-13.1	-1.0	-14.1	
2008	-10.7	-0.5	-11.2	
2009	-21.1	-0.9	-21.9	
2010	-21.6	-1.4	-23.0	
2011	-23.3	-2.8	-26.0	

# Table 1. PBGC Single and Multi-Employer Insurance Programs: Net Financial Position, FY2002 -FY2011

Source: PBGC.

The weakness in the economy in 2001, particularly in the steel and airline industries, led to large and expensive plan terminations that eliminated the surplus. By the end of 2004, the single-employer program had a deficit of \$23.3 billion. The deficit was \$13.1 billion at the end of 2007 and \$10.7 billion at the end of FY2008. The deficit increased to \$21.1 billion at the end of FY2009, \$21.6 billion at the end of FY2010, and \$23.3 billion at the end of FY2011. The

multiemployer program had a surplus from 1982 to 2002, but the PBGC reported that it had a deficit of \$473 million at the end of FY2008, \$869 million at the end of FY2009, \$1.4 billion at the end of FY2010, and \$2.8 billion at the end of FY2011.

## **Defined Benefit Pension Funding**

To ensure that sufficient money is available to pay promised pension benefits to participants and beneficiaries, ERISA sets rules that require plan sponsors to fully fund the pension liabilities of defined benefit plans. The funding requirements of ERISA recognize that pension liabilities are long-term liabilities. Consequently, plan liabilities need not be funded immediately, but instead can be amortized (paid off with interest) over a period of years.

The assets of the pension plan must be kept in a trust that is separate from the employer's general assets. Assets in the pension trust fund are protected from the claims of creditors in the event that the plan sponsor files for bankruptcy. ERISA requires employers that sponsor defined benefit plans to fund the pension benefits that plan participants earn each year. This is referred to as funding the target normal cost of the plan. In addition, the funding obligation for plan sponsors may be affected by the following:

- Pension benefits granted to employees for past service, but for which no monies were set aside.
- Increases in the level of benefits by plan amendment.
- Changes in the present value of future benefit obligations as a result of interest rate changes. Because DB pension benefits are generally paid as a stream of payments over several years in the future, the plan calculates a current value of the benefits by discounting the future cash flows using a specified interest rate. Changes in the interest rate cause the value of future benefit obligations—and the amount that plans must set aside to meet them—to change.
- Changes in the value of investments. Since many pension plans invest at least a portion of their assets in equities and other financial assets like bonds, changes in the stock market and other financial markets cause changes in the value of pension plans' assets. Decreases in value of investments must be made up by increases in plan sponsor contributions while increases in the value of investments may be used to offset future funding obligations.

Pension plan underfunding has increased in recent years. An analysis by Milliman found that the average funding by the 100 largest corporate DB plans has been less than 100% since July 2008 and was 72.4% as of December 31, 2011.<sup>1</sup>

### Funding Relief Enacted in the 111th Congress

The funding obligations for pension plans increased sharply in 2008 as a result of the economic recession that began in December 2007. Three factors have contributed to the increase in DB

<sup>&</sup>lt;sup>1</sup> Details of the analysis are available at http://www.milliman.com/expertise/employee-benefits/products-tools/pension-funding-index/.

pension plans sponsors' funding obligations: (1) the PPA changed some of the methods that plan sponsors use to value plan assets and liabilities; (2) the decline in the stockmarket in 2008 caused the value of pension plan assets to decrease because many pension plans hold part of their portfolios in equities; and (3) the decline in interest rates caused the value of pension plan benefit obligations to increase. In addition, the economic downturn may have hurt the ability of some pension plans to pay for their funding obligations. Some have suggested that monies that plan sponsors would use to fund their benefit obligations would be better spent on other, more immediate company priorities.

Congress provided funding relief to DB pension plan sponsors in 2010 in H.R. 3962, the Preservation of Access to Care for Medicare Beneficiaries and Pension Relief Act of 2010 (P.L. 111-192), which was introduced by Representative John Dingell on October 29, 2009. The bill passed the House on November 7, 2009, and did not contain any pension funding relief provisions. On June 18, 2010, an amended bill passed the Senate. The Senate approved bill contains funding relief provisions. The House passed the Senate's amendment to H.R. 3962 on June 24, 2010. The President signed the bill into law on June 25, 2010.<sup>2</sup>

#### Single-Employer Funding Relief

Changes to a pension plan's funding level that result in increased required funding by a plan sponsor may be amortized over a period of seven years. P.L. 111-192 allowed pension plan sponsors to amortize their funding shortfalls either over 9 years, with the first 2 years of payments consisting of interest only on the amortization charge and the next 7 years consisting of interest and principal, or over 15 years.

P.L. 111-192 contained provisions that required plan sponsors that chose one of these amortization schedules to make additional contributions to the plan if the plan sponsors pays excess compensation or declares extraordinary dividends.

Specifically, the provisions required additional contributions to the plan from plan sponsors that

- provided more than \$1 million in compensation to any employee;<sup>3</sup> and
- (1) paid dividends or redeem company stock greater than the value of a company's net income for the prior year or (2) paid dividends greater than the sum of a company's dividends in the previous five years.

#### **Certain Other Plans**

A provision allowed funding relief to plans that would otherwise be ineligible. Certain rural cooperatives and defense contractors were allowed to delay the implementation of the funding

<sup>&</sup>lt;sup>2</sup> Section 202 of the Worker, Retiree, and Employer Recovery Act of 2008 (WRERA; P.L. 110-458) allowed some firms to delay the implementation of increased funding requirements that were required by the PPA. For more information on this provision, see CRS Report R40171, *The Worker, Retiree, and Employer Recovery Act of 2008: An Overview*, by Jennifer Staman.

<sup>&</sup>lt;sup>3</sup> The following are exempted from the calculation of compensation: (1) amounts set aside for paying deferred compensation as part of a nonqualified deferred compensation arrangement; (2) compensation for services performed before March 1, 2010; and (3) payments for certain types of compensation as a result of a contract that was in effect prior to March 1, 2010.

requirements of the PPA. PBGC settlement plans were not subject to any of the provisions of the PPA. These plans would otherwise be ineligible for the funding relief provisions currently under consideration. P.L. 111-192 allows these plans to choose either the 9-year amortization period (with the first 2 years of payments consisting of interest only on the amortization charge) or the 15-year amortization period.

#### **Plans Run by Charities**

A credit balance is an amount of a plan sponsor's contributions to a pension plan that exceed the minimum funding requirement. Under current law, plans that are funded in excess of 80% may apply previous years' credit balances to offset the current year's required funding. P.L. 111-192 allowed charities as described in 26 U.S.C. 501(c)(3) to use prior years' credit balances if the plan was least 80% funded in the plan year that ended prior to September 1, 2008.

#### Multiemployer plans

Multiemployer plans may currently amortize their investment losses over a 15-year period. Under the DB funding provisions passed in P.L. 111-192, multiemployer plans can

- elect to amortize their net investment losses over 30 years if the plan sponsor can certify the plan's solvency over the amortization period; and
- use asset valuation methods that result in asset values that range from 80% to 130% of market value. They could use these valuation methods for up to 10 years.

Multiemployer plans that elect to use either of these funding relief methods are not be allowed to increase plan benefits for two years unless the benefit increases are funded by additional contributions to the plan.

### Funding Proposals in the 112th Congress

The funding obligations for pension plans continue to be a concern for some policymakers. Some policy analysts have raised the following points in discussions of changes to pension plan funding rules:

- Low interest rates in recent years have resulted in increases in the valuation of pension plan liabilities. Some have suggested that these increases may be much higher than is necessary to ensure that pension plans are able to pay current and future benefits to plan participants.<sup>4</sup>
- Pension plan sponsors would be able to invest funds in their businesses that they would otherwise have to contribute to their pensions, which could assist in the economic recovery.<sup>5</sup>

<sup>&</sup>lt;sup>4</sup> For example, in testimony to the House Subcommittee on Health, Employment, Labor, and Pensions of the House Education and Workforce Committee, Ken Porter, a pension plan consultant and former Corporate Chief Actuary for The DuPont Company, called current interest rates "artificially low." His testimony is available at http://edworkforce.house.gov/UploadedFiles/02.02.12\_porter.pdf.

<sup>&</sup>lt;sup>5</sup> See, for example, Hazel Bradford, a reporter for Pensions and Investments, "Pension Funding Changes Could Offer (continued...)

- Although funding relief could allow companies to use funds for investment purposes rather than pension contributions, plan sponsors may be reluctant to use funding relief if restrictions were attached to the use of funds saved. Such a restriction may have limited the use of the funding relief granted in 2010.<sup>6</sup>
- Pension plan contributions are obligations that have been willingly incurred by pension plan sponsors. Some have suggested that changes to pension plan funding rules might assist some companies to evade these obligations. In addition, while some plan sponsors may be facing financial difficulty, some plan sponsors may be able to meet their funding obligations. A recent article noted that "American corporations are sitting on record amounts of cash."<sup>7</sup>
- Changes to pension plan funding rules could exacerbate current pension plan underfunding.<sup>8</sup> Pension plan contributions are an obligation incurred by companies and greater underfunding could lead to greater losses for PBGC if these underfunded plans are terminated and are trusteed by PBGC.<sup>9</sup>

# Proposals in S. 1813, Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21), as Passed by the Senate on March 14, 2012

S. 1813, Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21), would, among other provisions, affect pension plan funding. These provisions would (1) extend an exception to the tax on use of excess pension plan assets if the assets are used for retiree health insurance, (2) allow for the first time the use of excess pension plan assets for retiree life insurance, and (3) place upper and lower bounds on the interest rates that pension plans use to value plan liabilities. S. 1813 was passed by the Senate on March 14, 2012. The Senate incorporated S. 1813, as passed by the Senate on March 14, 2012, into H.R. 4348 as an amendment on April 24, 2012.<sup>10</sup>

<sup>(...</sup>continued)

Some Relief," *Pensions&Investments*, March 19, 2012, available at http://www.pionline.com/article/20120319/ PRINTSUB/303199978/pension-funding-changes-could-offer-some-relief.

<sup>&</sup>lt;sup>6</sup> The 2010 funding relief required additional pension plan contributions from plan sponsors who chose funding relief and who (1) provided excess compensation to company executives, (2) engaged in stock buybacks above specified levels, or (3) paid dividends to shareholders above specified levels. For example, the Business Roundtable, which describes itself as an association of chief executive officers of leading U.S. companies, indicated that less than 5% of eligible companies elected the funding relief that became available in 2010. Their statement is available at http://businessroundtable.org/news-center/pension-funding-stabilization-communication-to-key-senate-staff/.

<sup>&</sup>lt;sup>7</sup> See, for example, Jacqueline Doherty, a reporter for Barron's, "Where Is All That Corporate Cash, Anyway?," *Barron's Online*, December 10, 2011, available at http://online.barrons.com/article/

 $SB50001424052748704048804577082712227921128.html \# article Tabs\_panel\_article\% 3D1.$ 

<sup>&</sup>lt;sup>8</sup> See, for example, Fitch Ratings, a credit rating agency that provides analysis of financial securities, "Pension Funding Relief May Again Prove Counterproductive," March 8, 2012, available at http://www.fitchratings.com/web/en/dynamic/articles/Pension-Funding-Relief-May-Again-Prove-Counterproductive.jsp.

<sup>&</sup>lt;sup>9</sup> See, for example, Roger Lowenstein, a financial journalist, "Don't Let Corporations Slash Pension Payments," *Bloomberg*, March 11, 2012, available at http://www.bloomberg.com/news/2012-03-11/don-t-let-corporations-slash-pension-payments-roger-lowenstein.html.

<sup>&</sup>lt;sup>10</sup> S. 1813 was introduced by Senator Barbara Boxer on November 7, 2011, and would, among other purposes, reauthorize federal-aid highway and highway safety construction programs. H.R. 4348, introduced by Representative John Mica on April 16, 2012, would, among other purposes, also reauthorize federal-aid highway and highway safety construction programs.

#### Use of Excess Pension Assets for Retiree Health and Life Insurance

In general, the Internal Revenue Code (IRC) imposes an excise tax if a pension plan sponsor withdraws assets from a pension plan, even if the plan has sufficient assets from which to pay future benefit obligations. The IRC provides an exception to the excise tax if a pension plan has assets in excess of 120% of the present value of future benefit obligations and the transfer is for the payment of retiree medical benefits. This provision is set to expire on December 31, 2013. Section 40310 of S. 1813, as passed by the Senate on March 14, 2012, would extend this provision through December 31, 2021.

Section 40311 of S. 1813, as passed by the Senate on March 14, 2012, would allow the transfer of excess pension assets to pay for retiree group term life insurance.

The Joint Committee on Taxation (JCT) estimated that these provisions would increase federal revenues by \$139 million from FY2012 to FY2017 and \$363 million from FY2012 to FY2022.<sup>11</sup>

#### Segment Rate Stabilization

The Pension Protection Act of 2006 (PPA; P.L. 109-280) specified that pension plans discount their future benefit obligations using one of three discount rates. The rate to be used, called a segment rate, depends on the date on which the benefit obligation is expected to be paid and the corresponding rates on the corporate bond yield curve.<sup>12</sup> The segment rates are calculated as the average of the corporate bond yields within the segment for the preceding 24 months. The first segment is for benefits payable within five years. The second segment is for benefits payable in 5 to 15 years. The third segment is for benefits payable in 15 years or later. The 24-month segment rates in June 2012 are 1.84% for the first segment, 4.79% for the second segment, and 5.90% for the third segment.<sup>13</sup>

Section 40312 of S. 1813, as passed by the Senate on March 14, 2012, would allow for the segment rates to be adjusted if they are below or above specified (called the "applicable") minimum and maximum percentages of the average of the rates for the preceding 25 years.<sup>14</sup> Segment rates that are lower than the applicable minimum percentage of the average of the corporate bond yields for the preceding 25 years would be set to the applicable minimum percentage of the average. Segment rates that are higher than the applicable maximum percentage of the segment rates for the preceding 25 years would be set at the applicable maximum percentage of the average.

**Figure 1** shows a hypothetical example of how segment rates would be determined under the proposal. The red line shows the average of a segment's interest rates for the preceding 25 years.

<sup>&</sup>lt;sup>11</sup> See U.S. Congress, Joint Committee on Taxation, Estimated Revenue Effects Of The Revenue Provisions Contained In S. 1813, As Amended, The "Highway Investment, Job Creation, And Economic Growth Act Of 2012", prepared by The Joint Committee on Taxation, 112<sup>th</sup> Cong., 2<sup>nd</sup> sess., March 14, 2012, JCX-26-12 (Washington: GPO, 2012), available at https://www.jct.gov/publications.html?func=startdown&id=4410.

<sup>&</sup>lt;sup>12</sup> The yield curve is a graph that relates the maturity of a bond to the interest rate that bondholders receive for a bond of that maturity.

<sup>&</sup>lt;sup>13</sup> The U.S. Treasury updates the segment rates monthly. They are available at http://www.irs.gov/retirement/article/ 0,,id=174520,00.html.

<sup>&</sup>lt;sup>14</sup> In Section 40312 of S. 1813, the 25-year period would end on September 30 of the calendar year preceding the calendar year in which the plan year begins.

The blue lines indicate the minimum and maximum rates around the 25-year average. The shaded yellow area is the range around the 25-year average in which segment rates could fall without being adjusted. The black line indicates hypothetical segment rates in six different months. The three scenarios possible for segment rates are:

- Segment rates above the applicable range: If Treasury determined that the segment rate were above the maximum segment rate (points (1) and (2) in Figure 1), then under the proposed provision, Treasury would adjust the segment rate downward until it equaled the proposed maximum segment rate (the green dots in Figure 1).
- Segment rates within the applicable range: If Treasury determined that the segment rate were at or below the maximum segment rate and at or above the minimum segment rate (points (3) and (4) in Figure 1), Treasury would not adjust the segment rates.
- Segment rates below the applicable range: If Treasury determined that the segment rate were below the minimum segment rate (points (5) and (6) in Figure 1), then Treasury would adjust the interest rate upward until it equaled the proposed minimum segment rate (the pink dots in Figure 1).

CRS has not estimated the amount by which segment rates as currently calculated are lower than proposed minimum segment rates.



Figure 1. Hypothetical Application of Segment Rate Stabilization Provision as Found in S. 1813, as Passed by the Senate on March 14, 2012

**Source:** Congressional Research Service.

**Note:** In this hypothetical example, under the segment rate stabilization provision, interest rates at points (1) and (2) are higher than the maximum segment rate and would be adjusted downward; interest rates at points (3) and (4) would not be adjusted; and interest rates at points (5) and (6) are lower than the minimum segment rate and would be adjusted upward.

In Section 40312 of S. 1813, as passed by the Senate on March 14, 2012, the minimum percentage below the 25-year average segment rate would be decreased, and the maximum percentage above the 25-year average segment rate would be increased, each year from 2013 to 2015. These proposed minimum and maximum percentages are listed in **Table 2**. For example, the first segment rate (for benefits payable within five years) is calculated as the average of short-term corporate bond yields for the previous 24 months. For June 2012, this first segment rate is 1.84%. If this segment rate is less than 90% of the average of corporate bond yields for the preceding 25 years, then, for the purposes of calculating pension obligations that will be paid within 5 years, the segment rate would be adjusted upward until it equaled 90% of the average for the preceding 25 years. The minimum percentage would decrease from 90% in 2012 to 70% after 2015 and the maximum percentage would increase from 110% in 2012 to 130% after 2015. This means that the shaded area of **Figure 1** would be larger over time and, potentially, segment rates that fall outside the allowable range in a given year (and would, therefore, be adjusted).

Calendar Year	Applicable Minimum Percentage	Applicable Maximum Percentage
2012	90%	110%
2013	85%	115%
2014	80%	120%
2015	75%	125%
After 2015	70%	130%

Table 2. Applicable Minimum and Maximum Interest Rate Percentages of 25 Year Averages for Pension Funding in S. 1813, as Passed by the Senate on March 14, 2012

Source: Congressional Record, March 13, 2012, p. S1625.

The JCT estimated that from FY2012 to FY2017, this provision would increase tax revenues by \$16.7 billion, increase PBGC premiums by \$625.0 million, and result in an increase in the Old-Age, Survivors, and Disability Insurance (OASDI or Social Security) trust fund of \$792.0 million. The JCT estimated that from FY2012 to FY2022, this provision would increase tax revenues by \$8.17 billion, increase PBGC premiums by \$650.0 million, and result in a decrease in the OASDI trust fund of \$73.0 million.<sup>15</sup>

Interest rates have generally declined over the past 25 years. **Figure 2** shows the yield on longterm corporate bonds that are rated Aaa by Moody's Investors Services from January 1986 to May 2012.<sup>16</sup> These rates would be a component of long-term segment rates. Treasury calculates segment rates from a variety of corporate bond maturities, including short-, medium-, and longterm bonds. While short- and medium-term yields are generally lower than 30-year bond yields, the trend in yields for short- and medium-term bonds would be similar to the trend in yields for long-term bonds shown in **Figure 2**. The 24-month segment rates in June 2012 are 1.84% for the first segment, 4.79% for the second segment, and 5.90% for the third segment. Given that the segment rate stabilization proposal would use interest rates that are averages of 25 years' prior rates, the 25-year average of the segment rates would likely decrease over the next few years.

<sup>16</sup> Aaa bonds are rated by Moody's to have the lowest default risk, and therefore have the lowest yields among corporate bonds. The Federal Reserve, which provides data on many interest rate series, notes that Moody's Aaa Corporate Bond Yield series tries to include bonds with remaining maturities as close as possible to 30 years. Generally, interest rates are higher for bonds of longer maturities (e.g., the yield on 30 year bonds is higher than the yield on 10 year bonds) and for bonds in which the probability of default is higher (e.g., the yields for corporate bonds are higher than the yields for U.S. government securities and the yields for the bonds of corporations in poor financial condition are higher than for the bonds of corporations in good financial condition). The Federal Reserve's interest rate data are available at http://research.stlouisfed.org/fred2/categories/22.

<sup>&</sup>lt;sup>15</sup> See U.S. Congress, Joint Committee on Taxation, Estimated Revenue Effects Of The Revenue Provisions Contained In S. 1813, As Amended, The "Highway Investment, Job Creation, And Economic Growth Act Of 2012", prepared by The Joint Committee on Taxation, 112<sup>th</sup> Cong., 2<sup>nd</sup> sess., March 14, 2012, JCX-26-12 (Washington: GPO, 2012), available at https://www.jct.gov/publications.html?func=startdown&id=4410.



Figure 2. Moody's Seasoned Aaa Corporate Bond Yields

**Source:** Board of Governors of the Federal Reserve System.

**Notes:** The Federal Reserve Board notes that the Moody's series tries to include bonds with remaining maturities as close as possible to 30 years. The U.S. Treasury calculates segment rates from a variety of corporate bond maturities, including short-, medium-, and long-term bonds.

# **Proposal to Use Segment Rate Stabilization and PBGC Premium Increases to Offset Freeze in Student Loan Interest Rates**

Senate Majority Leader Harry Reid, in a letter dated June 7, 2012, to Senate Minority Leader Mitch McConnell and Speaker of the House John Boehner, offered two proposals to offset a proposed one-year extension of current student loan interest rates.<sup>17</sup> Senator Reid's proposals would (1) use the segment rate stabilization provision adopted in S. 1813, as passed by the Senate on March 14, 2012, and (2) increase the premiums that pension plan sponsors pay to PBGC.<sup>18</sup> The letter did not indicate the amount by which PBGC premiums would increase. To date, S. 1813 has not included any proposals to increase PBGC premiums.<sup>19</sup>

<sup>&</sup>lt;sup>17</sup> For more information on the interest rates charged on student loans, see CRS Report R42515, *Interest Rates on Subsidized Stafford Loans to Undergraduate Students*, by David P. Smole.

<sup>&</sup>lt;sup>18</sup> See "Reid Offers Bipartisan Proposal To Fund Student Loan Bill" available on the Senate Democrats website at http://democrats.senate.gov/2012/06/07/reid-offers-bipartisan-proposal-to-fund-student-loan-bill.

<sup>&</sup>lt;sup>19</sup> For more information on proposals to increase PBGC premiums, see CRS Report R42521, *Proposals to Change Pension Benefit Guaranty Corporation's (PBGC) Premium Structure: Issues for Congress*, by John J. Topoleski.