PBGC
Pension Benefit
Guaranty Corporation

Annual Report
2018

A MESSAGE FROM OUR CHAIR

This Administration is committed to and values the protection of retirement benefits of America's workers and retirees. The Pension Benefit Guaranty Corporation (PBGC) plays a vital part in safeguarding Americans' hard-earned retirement benefits by protecting pension plans and paying guaranteed pension benefits timely and accurately.

On behalf of Treasury Secretary Steve Mnuchin, Commerce Secretary Wilbur Ross, and the PBGC, I am pleased to present the PBGC's FY 2018 Annual Report. The Annual Report provides important financial and operational information about PBGC's Multiemployer and Single-Employer Insurance Programs and activities. We are proud of the accomplishments PBGC has achieved this year, including its new mediation pilot program; high customer satisfaction scores; regulatory activities that protect pensioners and reduce burdens on plans and sponsors; improvements on internal controls; and working with plan sponsors to better protect participants in active plans.

The PBGC Single-Employer Program and Multiemployer Program have both operated at a deficit for fifteen years or longer. While PBGC's overall net financial position remained in deficit in FY 2018, the Single-Employer Program showed improvement, emerging from deficit to a positive net position. We remain concerned, however, regarding the Multiemployer Program not being able to meet its obligations before the end of FY 2025. The Board looks forward to the report of the Joint Select Committee on Solvency of Multiemployer Pension Plans as well as continuing to work with Members of Congress and stakeholders on solutions to safeguard pension benefits.

R. Alexander Acosta
Secretary of Labor
Chair of the Board

A MESSAGE FROM THE DIRECTOR

The Pension Benefit Guaranty Corporation protects the retirement security of nearly 37 million American workers, retirees and their families in private-sector defined benefit pension plans. The protection PBGC provides encourages employers and workers to voluntarily establish and participate in pension plans, make pension benefit commitments, and set money aside today to be available to make retirement payments many years in the future. However, these benefits are at constant risk due to events such as bankruptcy or insolvency. Without PBGC's protection, hundreds of thousands of people would have lost their life's savings. PBGC has been providing this protection since the enactment of the Employee Retirement Income Security Act of 1974.

This year, we paid benefits to more than 861,000 retirees in 4,919 failed single-employer plans. An additional 532,000 retirees are scheduled to receive their benefits from us when they retire. The Corporation also provided financial assistance to 81 multiemployer plans covering 62,300 retirees. Our goal is that these retirees and beneficiaries never miss a check.

The sound financial condition of our insurance programs, Single-Employer and Multiemployer, is vital for us to meet our mission. This year's report shows that the financial condition of these two programs remains in stark contrast. The financial status of the Single-Employer Program shows continuous improvement and reached a positive net position this year. However, the Multiemployer Program remains in deep deficit and we project that under current law it will run out of funds within the next several years.

The challenges we face in the Multiemployer Program are increasing as the date of the program's insolvency grows closer. As more time passes, the changes required to prevent insolvency become more disruptive and painful for participants, plans and employers. This year, I testified before the Joint Select Committee on Solvency of Multiemployer Pension Plans. I described the status of the Multiemployer Program, laying out the severity of the problem, the consequences of what could happen if the program becomes insolvent and the need for Congress to enact a viable and fair solution.

With these challenges at the forefront, we will continue to use the limited tools that we have on hand to help the multiemployer community and troubled plans. This year, we issued guidance pertaining to multiemployer plans, such as withdrawal liability guidance and a facilitated merger rule under the Multiemployer Pension Reform Act of 2014, to help improve the health of some multiemployer plans over the long term.

PBGC continues to serve as a source of expertise and assistance to the pension community and the public. We have engaged and educated stakeholders, the media and the public and have received important feedback from those who interact with us. We remain committed to providing excellent service to all our stakeholders.

Our success is made possible by the talented and professional staff at PBGC. I am truly grateful for their passion in focusing their wide-ranging talents on ensuring that American retirees and their families enjoy the financial security that they worked a lifetime to achieve.

WTReeder

W. Thomas Reeder
Director
November 15, 2018

FISCAL YEAR (FY) 2018 ANNUAL REPORT

This annual report is prepared to meet applicable legal requirements and is in accordance with and pursuant to the provisions of: the Government Corporation Control Act, 31 U.S.C. Section 9106; Circular No. A-11, Revised, "Preparation, Submission and Execution of the Budget," Office of Management and Budget, June 29, 2018; and Circular No. A-136 Revised, "Financial Reporting Requirements," Office of Management and Budget, July 30, 2018. Section 4008 of the Employee Retirement Income Security Act of 1974 (ERISA), 29 U.S.C. Section 1308, also requires an actuarial report evaluating expected operations and claims that will be issued as soon as practicable.

ANNUAL PERFORMANCE REPORT

Established by the Employee Retirement Income Security Act of 1974 (ERISA), the Pension Benefit Guaranty Corporation (PBGC or the Corporation) insures the pension benefits of workers and retirees in private-sector defined benefit pension plans.

PBGC has two legally separate insurance programs, which are operated and financed independently. These programs protect the retirement security of nearly 37 million American workers, retirees and beneficiaries in both single-employer and multiemployer plans. In fiscal year 2018, the Corporation made benefit payments to more than 861,000 people in failed single-employer plans in various industries, such as construction, trucking, retail, and airline.

Whereas PBGC's Single-Employer Insurance Program pays guaranteed benefits directly to retirees and beneficiaries in failed plans, the Corporation's Multiemployer Insurance Program provides financial assistance to insolvent plans to enable them to pay guaranteed benefits to their participants. Looking ahead, it is estimated that PBGC will need to provide financial assistance to about 130 multiemployer plans, covering 1.3 million people, that are expected to run out of money over the next 20 years. Absent legislative changes, more and larger claims on the Multiemployer Program will likely lead to the program's insolvency. PBGC's most recent annual Projections Report (FY 2017) indicates that the Multiemployer Program's risk of insolvency rises rapidly and is likely to occur by the end of FY 2025.

The Corporation strives for excellence in achieving these three strategic goals:

- Preserve plans and protect plan participants and their families.
- Pay benefits accurately and on time.
- Maintain high standards of stewardship and accountability.

OPERATIONS IN BRIEF

PBGC strengthens retirement security by preserving plans and protecting plan participants and their families. The Corporation guarantees payment, up to legal limits, of the pension benefits earned by nearly 37 million American workers and retirees in more than 25,000 plans. Since 1974, PBGC has taken responsibility for paying the benefits of about 1.5 million people in over 5,000 failed single-employer and multiemployer plans. PBGC made benefit payments of $5.9 billion in FY 2018.

To preserve plans and protect plan participants in FY 2018, the Corporation:

- Helped to protect about 52,000 people by taking action in eight bankruptcy cases to encourage companies to keep their plans when they emerged from bankruptcy.
- Paid $153 million in financial assistance to 81 insolvent multiemployer plans.
- Negotiated over $550 million in financial protection, through its Early Warning Program, for nearly 100,000 people in plans put at risk by certain corporate events and transactions. PBGC works collaboratively with plan sponsors to negotiate agreements that protect pensions and avoid placing an unnecessary burden on premium payers.
- Conducted compliance reviews of plan sponsor calculations for plans that ended through standard terminations, resulting in almost 4,157 participants receiving corrected benefit amounts with a value of $12.2 million.

To pay timely and accurate benefits in FY 2018, the Corporation:

- Assumed responsibility for 58 trusteed single-employer plans covering more than 28,000 people.
- Started paying benefits to more than 14,700 retirees in single-employer plans.
- Paid $5.8 billion to more than 861,000 retirees from 4,919 failed single-employer plans.

To maintain high standards of stewardship and accountability in FY 2018, the Corporation:

- Achieved an unmodified financial statement audit opinion and an unmodified opinion on internal controls.
- Closed nine recommendations related to three significant internal control deficiencies.
- Continued providing outstanding service to retirees, as demonstrated by a retiree customer satisfaction score of 89, which is among the best in the public and private sectors, according to the American Customer Satisfaction Index.
- Published the FY 2018 – FY 2022 Strategic Plan,[1] updating PBGC's strategic goals, objectives and performance measures for the next four-year planning period.

[1] https://www.pbgc.gov/sites/default/files/pbgc-strategic-plan-2018-2022.pdf

STRATEGIC GOALS AND RESULTS

PBGC's FY 2018 Annual Performance Report highlights the Corporation's achievements, accomplishments and performance results through the lens of its strategic goals. The Corporation's priorities are to preserve plans and protect pensioners, to pay timely and accurate benefits and to maintain high standards of stewardship and accountability.

GOAL NO. 1: PRESERVING PLANS AND PROTECTING PENSIONERS

PBGC engages in activities to preserve plans and protect plan participants by administering two separate insurance programs. The Multiemployer Program protects about 10.6 million workers and retirees in about 1,400 pension plans. The Single-Employer Program protects about 26.2 million workers and retirees in about 23,400 pension plans.

This year, the Multiemployer Program:

- Paid $153 million in financial assistance to 81 multiemployer pension plans covering the benefits of over 62,300 existing retirees and 27,800 people entitled to benefits once they retire. Seven of the 81 plans, covering about 1,100 participants, became insolvent during FY 2018.
- Performed 13 multiemployer plan audits to protect the benefits of more than 14,000 people.

This year, the Single-Employer Program:

- Paid $5.8 billion in benefits to more than 861,000 retirees in single-employer plans.
- Monitored on average 1,500 companies for financial transactions that potentially pose risks to the financial viability of plans.
- Protected pensioners whose plan sponsors were in bankruptcy by encouraging plan continuation and when that is not possible, pursuing recoveries from employers.
- Ensured that participants received the law's full protection in both underfunded and fully funded plan terminations.

MULTIEMPLOYER PROGRAM

A multiemployer pension plan is created through a collective bargaining agreement between employers and a union — usually in the same or related industries. Multiemployer plans provide benefits for people in various industries, such as transportation, construction, mining, hospitality and others. PBGC's Multiemployer Program provides financial assistance to insolvent multiemployer plans and offers technical assistance to plan trustees and administrators, service providers and other stakeholders in an effort to help plans extend their solvency.

The Corporation works closely with all insolvent multiemployer plans to review their requests for PBGC financial assistance. In FY 2018, PBGC paid $153 million in financial assistance to 81 insolvent multiemployer plans. At year-end there were 78 insolvent plans expected to continue to receive financial assistance covering 62,300 participants currently receiving benefits. An additional 27,800 people are entitled to benefits once they retire. PBGC performed audits of 13 plans covering more than 14,000 people. The objectives of the audits are to ensure timely and accurate payment of benefits to all plan participants, compliance with laws and regulations and effective and efficient management of the assets remaining in terminated and insolvent plans.

Absent changes in the law, the Multiemployer Program is likely to run out of money by the end of FY 2025. Restoring the program to long-term solvency requires congressional action. PBGC works with troubled multiemployer plans to extend plan solvency and protect participants' benefits. The Corporation also continues to implement provisions of the Multiemployer Pension Reform Act of 2014 (MPRA).

Multiemployer Plan Partitions and Applications for Benefit Suspensions

MPRA provides options for plans that are likely to become insolvent when facing funding issues. Certain critical and declining plans that are projected to run out of money may ask PBGC for partition assistance. A partition allows plans to transfer responsibility for paying a portion of participants' and beneficiaries' monthly guaranteed benefit to a newly created successor plan that receives financial assistance from PBGC.

For a plan to be eligible for a partition, the plan sponsor must show that all reasonable measures to avoid insolvency have been made, including making the maximum benefit reductions allowed under the law. The plan must also demonstrate that a partition is necessary for the plan to avoid running out of money. If a partition is approved, the original plan has an ongoing obligation to pay and preserve benefits for all participants at levels above the PBGC guarantee amounts, after taking into account any benefit reductions.

Plans applying for partition are also required to apply to the Treasury Department for a suspension of benefits. Applications must show benefit reductions to 110 percent of the PBGC-guarantee level, except for age- and disability-protected benefits. PBGC provides consultation to the Treasury Department in the review of benefit suspension applications.

In FY 2018, PBGC conditionally approved a partition application for the Teamsters Local 805 Pension and Retirement Plan (805 Plan), which covers about 2,000 participants. The approval is contingent on the Treasury Department's final authorization to suspend benefits. If the Treasury Department issues final authorization, early financial assistance from PBGC to the newly partitioned plan, combined with required benefit reductions, is expected to allow the original 805 Plan to avoid insolvency in the long term.

Multiemployer Plan Mergers and Transfers

Plan mergers are a way to help protect benefits in multiemployer plans. In general, mergers can broaden a plan's contribution base, reduce small plan administrative and investment expenses and rescue troubled plans from projected insolvency. Similarly, transfers of assets and liabilities between plans, often accompanied by a plan merger, can have a positive impact on all plans involved. Such transfers may result in steady or improved funding to help sustain the plans.

In FY 2018, PBGC issued determinations that five multiemployer plans met the legal requirements for merger. The Corporation also issued two determinations that a transfer of liabilities and assets between multiemployer plans met the legal requirements. One of these transfers was from the Bakery Drivers Local 194 Plan, which is expected to go insolvent, to another plan that is expected to remain solvent.

PBGC also approves requests from multiemployer plans regarding plan withdrawal liability rules. Alternative or special withdrawal liability rules can extend plan solvency. In FY 2018, the Corporation approved four alternative allocation method requests. PBGC also approved one request from a non-construction industry plan to apply the ERISA construction industry withdrawal liability rules.

Joint Select Committee on Solvency of Multiemployer Pension Plans

Established by the Bipartisan Budget Act of 2018, the Joint Select Committee on Solvency of Multiemployer Pension Plans (Select Committee) is tasked with providing recommendations and legislative language that will significantly improve the solvency of multiemployer pension plans and the Corporation. The Select Committee has conducted six hearings since its inception in March 2018. PBGC's Director W. Thomas Reeder testified before the Select Committee about the structure and financial outlook of PBGC. At the Select Committee's request, the Corporation has provided three PBGC multiemployer pension experts to work with the Select Committee. These experts assist with briefings on various aspects of multiemployer pensions and with development and analysis of possible legislative solutions. PBGC has also provided technical assistance to help the Select Committee analyze various reform proposals. The Select Committee's report is due by November 30, 2018.

SINGLE-EMPLOYER PROGRAM

The Single-Employer Program covers defined benefit pension plans that generally are sponsored by one employer. When an underfunded single-employer plan terminates, PBGC steps in to pay participants' benefits up to limits set by law. This typically happens when the employer sponsoring an underfunded plan goes bankrupt or out of business, or can no longer afford to keep the plan going. PBGC takes over the plan's assets, administration and payment of plan benefits up to the legal limits. In some instances, if the plan has enough money to pay all benefits owed to participants, the plan sponsor can choose to voluntarily terminate its pension plan by opting into a standard termination agreement.

Protecting Pensioners When Plans Are at Risk

As part of risk mitigation activities, PBGC monitored on average 1,500 companies to identify transactions and events that potentially posed risk to the people covered under their pension plans. The Corporation works collaboratively with employers to reach agreements for suitable protections to safeguard participant benefits.

In March 2016, PBGC and Sears executed a pension plan protection agreement under which Sears agreed to protect the assets of certain special purpose subsidiaries holding real estate and intellectual property assets for the benefit of Sears's pension plans. Since then, Sears and PBGC have entered into four amendments to this agreement, each of which monetized parts of PBGC's interests. In March 2018, PBGC and Sears closed on an agreement that provided approximately $520 million in funding for Sears's two pension plans in exchange for permitting Sears to monetize real estate collateral protected in the March 2016 agreement. In August 2018, PBGC and Sears closed on a transaction which provided an additional $32 million in funding for Sears's pension plans in exchange for PBGC's release of liens on certain real estate that it had been granted in connection with an earlier amendment. The pension plans cover about 90,000 participants. In total, the four amendments have led to contributions of over $1 billion.

Subsequent to year end, Sears entered bankruptcy on October 15, 2018. At this time, the pension plans remain ongoing and under the responsibility of Sears. If circumstances require, PBGC is prepared to step in and provide PBGC-guaranteed benefits.

Protecting Pensioners When Companies Are in Bankruptcy or Go Out of Business

PBGC works diligently to encourage the continuation of pension plans, where possible, when plan sponsors undergo bankruptcy protection. When companies enter bankruptcy, PBGC first seeks to preserve their plans. PBGC takes an active role in bankruptcies and works to prevent unnecessary plan terminations. If a pension plan must be terminated as part of a bankruptcy proceeding, PBGC pursues claims and recoveries on behalf of the pension plan and the pension insurance program. The largest of these cases included:

- Avaya Inc. emerged from bankruptcy in FY 2018 with one of its two pension plans ongoing. Although the company had initially sought to retain both pension plans when it entered bankruptcy protection in January 2017, the company ultimately determined that it could not emerge from bankruptcy with both plans ongoing. Avaya retained the hourly plan, with nearly 7,000 participants and $600 million in underfunding, and terminated the salaried plan, with nearly 8,000 participants and $938 million in underfunding. In the settlement of the termination liability of the salaried plan, PBGC received $340 million in cash and 5.5 percent of the equity in reorganized Avaya. The plan of reorganization valued PBGC's total recovery at $462 million, including the equity. In addition to the settlement received for the salaried plan, the case team negotiated additional protections for the ongoing hourly plan. To protect the hourly plan against any future value-diminishing transactions, PBGC negotiated for excess contributions to the hourly plan in the event of certain material transactions. The amount of these excess contributions will be the lesser of $150 million or an amount equal to the projected minimum required contributions for the four plan years immediately following the date of the material transaction.

- Westinghouse and 29 affiliates filed for bankruptcy on March 29, 2017. After a bidding process in December 2017, the company agreed to be acquired by Brookfield for $4.6 billion. Though Brookfield agreed to assume the pension plan, which had unfunded benefit liabilities of $952 million, PBGC was concerned that the pension plan would face undue risk after the company emerged from bankruptcy. Brookfield and PBGC negotiated a settlement agreement that contemplated a $100 million voluntary contribution to the pension plan, with the possibility of another contribution of $20 million or more once the bankruptcy claims resolution process is complete. On August 2, 2018, Westinghouse made the $100 million contribution. The amount of the contingent contribution should be known before the end of calendar year 2018.

- Energy Future Holdings Corporation, the largest power company in Texas, emerged from bankruptcy protection after nearly four years. The reorganized company continues to sponsor its two pension plans, with over 25,500 participants and $908 million in underfunding.

- Cenveo, Inc., one of North America's largest printing and envelope companies, and its affiliates sought bankruptcy protection in FY 2018. The bankruptcy court has approved Cenveo's plan of reorganization, which provides for the company to continue its two pension plans. The plans cover almost 6,500 participants and are underfunded by $155 million.

Standard Terminations

A company can end a fully funded plan in a standard termination by paying all the benefits it owes. In FY 2018, almost 1,600 plans, covering approximately 204,500 participants, filed standard terminations. The number of standard terminations has increased possibly due to rising interest rates reducing the cost of settling plan benefits. Large plans that filed standard terminations this year include AutoZone Inc. Associates Pension Plan, the Dana Retirement Plan, Avery Dennison Pension Plan and Sherwin-Williams Company Salaried Employees Pension Investment Plan.

Several other large plans completed previously filed standard terminations. These included Community Hospitals of Indiana Inc. Retirement Plan, Abbott/Hospira Transitional Annuity Retirement Plan, Menasha Corporation Retirement Income Plan, CVS Health Corporation Legacy Pension Plan, First American Financial Corporation Pension Plan, Accenture United States Pension Plan, Bright House Networks Pension Plan, The Kroger Consolidated Retirement Benefit Plan and Invensys Pension Plan. Approximately 1,470 plans, with more than 240,600 participants, completed standard terminations in FY 2018.

There are times when a company that goes out of business may still be able to fully pay all of its pension plan benefit obligations through a standard termination agreement. In the case of Dawson International Holdings (USA), Inc., the court approved the company's plan of liquidation, providing a standard termination of the pension plan. Over two years, PBGC successfully worked with debtors to overcome opposition from other creditors so the debtors could fully fund the pension plan, protecting the benefits of over 800 participants.

In another case, PBGC successfully filed liens against multiple real property parcels that the Oak Tree Farm Dairy controlled group was in the process of selling as it began a gradual out-of-court liquidation. PBGC worked cooperatively with the controlled group over six years, resulting in using sales proceeds to fully fund its two pension plans, protecting the benefits of over 200 participants. Those two plans filed standard terminations.

In FY 2018, PBGC conducted 401 standard termination audits to verify that plan sponsors properly calculated participants' benefits due to the plan termination. Through these audits, PBGC found errors that plan sponsors have since corrected. As a result, almost $12.2 million in additional benefits were distributed to 4,157 people in these plans.

Significant Litigation

PBGC protects participants in America's private-sector pensions through litigation in federal and state courts.

- In September 2018, the appellate court agreed with PBGC in *PBGC v. Findlay* that controlled group liability and successor liability are proper avenues for PBGC to pursue. In *Findlay*, PBGC sued the sponsor's controlled group and successors to recover unfunded benefit liabilities and termination premiums of over $30 million. The appellate court agreed with PBGC that leasing to a business under common control is always a "trade or business," to support the controlled group rules' purpose of preventing employers from shielding assets from liability. The appellate court also held, again to further ERISA's purposes, that when parties related to the sponsor purchase the sponsor's assets, they are subject to single-employer plan termination liabilities if they had notice of the liabilities and substantially continued the sponsor's business.

- In FY 2018, PBGC won motions in district and appellate courts in *Lewis v. PBGC*, rejecting all claims against PBGC by nearly 1,700 former Delta Pilots on their challenge to the PBGC Appeals Board's determination of their benefits. In June 2018, the district court held that the deferential *Chevron* standard of review applies to PBGC's interpretations of ERISA and held that those interpretations were reasonable. (Under the Supreme Court case *Chevron v. Natural Resources Defense Council*, courts defer to an agency's reasonable interpretations of a statute it is charged to administer.) In August 2018, the court of appeals rejected the one count that remained in the suit, a fiduciary breach claim the pilots asserted to recover PBGC's post-termination investment gains on plan assets. The court held that under the terms of ERISA, any increase in asset value after plan termination belongs to PBGC.
- In January 2018, the D.C. Circuit denied class counsel's request for an additional $2 million in attorneys' fees in *Page, et.al., v. PBGC*; *Collins, et. al., v. PBGC*, triggering the close of this two-decades-long settlement. PBGC entered into the *Page/Collins* settlement in 1996, agreeing to pay benefits to participants in plans that terminated soon after ERISA passed but that had not been amended to comply with the new law. The settlement was expected to close in 2002 but the parties disagreed on several issues, including attorneys' fees. With the additional guidance provided through the attorneys' fee appeal, and the district court's active supervision, the parties worked cooperatively to ensure completion of the tasks required for dissolution and discharge of the Class Action Settlement Board, which is responsible for overseeing the settlement. Accordingly, in July 2018, the district court discharged the parties and the Board pending the close of all remaining tasks, which were completed by September 30, 2018.
- In November 2017, PBGC defeated a motion by FBOP Corporation, a bank holding company, that would have disposed of PBGC's effort to recover $30 million that was erroneously paid to FBOP because of a Treasury computer error. In 2009, FDIC took over FBOP's banks and the company proceeded to liquidate its assets. PBGC terminated the pension plan to protect the interests of plan participants. Although the parties agreed to offset the $30 million termination liability to PBGC against FBOP's federal tax overpayment, an IRS process failure resulted in the funds being paid to FBOP, with both FBOP and FDIC claiming a right to the funds. After the court ruling, the parties reached a negotiated settlement of $20.8 million, and PBGC has received all payments.

Pilot Mediation Program

PBGC's practice is to resolve early warning and termination liability matters on a consensual basis with plan sponsors without the need for litigation. The Corporation's team of experienced professionals are committed to achieving settlements that are affordable for each plan sponsor. In response to business community comments and concerns, PBGC initiated a pilot program in FY 2018 that offers mediation to facilitate resolution of negotiations in two key PBGC program areas.[1] PBGC offers mediation to ongoing plan sponsors as part of the Early Warning Program and to former plan sponsors as part of resolving their pension liabilities following termination of underfunded pension plans. PBGC offered the program to several plan sponsors and has already successfully reached a mediated settlement in the first case.

[1] https://www.pbgc.gov/prac/other-guidance/pbgc-plan-sponsor-pilot-mediation-project

GOAL NO. 2: PAYING TIMELY AND ACCURATE BENEFITS

Through its Single-Employer Program, PBGC is directly responsible for the benefits of 1.4 million current and future retirees in trusteed pension plans. These Americans count on PBGC to pay their benefits accurately and on time.

Benefits Administration

PBGC becomes the trustee of single-employer plans that end without enough money to pay all their promised benefits. In FY 2018, PBGC took responsibility for 58 single-employer plans that provide the pension benefits to more than 28,000 current and future retirees.

When PBGC assumes responsibility for a pension plan, the first priority is to make sure the plan's existing retirees continue to receive benefits without interruption. In FY 2018, PBGC's Office of Benefits Administration (OBA) oversaw the seamless transition of more than 14,700 retirees to direct payments from PBGC.

The five largest plans that PBGC trusteed in FY 2018 were sponsored by Avaya Inc. (7,978 participants); Carson Pirie Scott, Inc. formerly known as Parisian, Inc. (5,970 participants); Appvion, Inc. (3,216 participants); Appleton Coated LLC (two plans; 1,286 participants); and Morehead Memorial Hospital (1,157 participants).

In FY 2018, PBGC paid $5.8 billion in benefits to more than 861,000 retirees in single-employer plans. More than 29,000 new retirees applied for benefits. The Corporation processed more than 91 percent of those applications in 45 days or less, exceeding its performance target of 87 percent for FY 2018.

Accuracy of benefit amounts is also a priority. If the Corporation has not completed the process required to issue a final benefit determination at the time eligible participants request to start receiving their benefit, PBGC begins paying them an estimated benefit. Currently, more than 210,000 retirees whose final benefit determinations are in the process of being calculated receive an estimated benefit amount. In FY 2018, more than 93 percent of final benefit determinations issued were within 10 percent of the estimated benefit amount. This is slightly below PBGC's target of 95 percent.

After PBGC becomes trustee of a plan, OBA begins a complex process of valuing the plan's assets, reviewing plan and participant data and calculating benefits payable under the legal limits. Only after this process is completed can participants be informed of the exact amount of their benefit.

In recent years, PBGC has focused on calculating final benefits in its largest and most complex plans and improving work products and processes in response to recommendations by the Office of Inspector General. With process improvements in place generating new efficiencies, OBA reduced the average processing time from 6.23 years in FY 2017 to 6.11 years in FY 2018. OBA expects to continue this reduction in processing times in FY 2019.

Reviews and Appeals

When participants and beneficiaries in trusteed single-employer plans disagree with PBGC's determination of their benefit, they have the right to bring their concerns to PBGC's Appeals Board. Plan sponsors may also appeal certain PBGC determinations. The Appeals Board independently reviews each appeal and provides a detailed written explanation of its decision. The Appeals Board started FY 2018 with 102 open appeals. During FY 2018, the Appeals Board accepted 186 new appeals and closed 204 appeals, with 84 still open at the end of the year. The Appeals Board statistics for the past 10 fiscal years are on PBGC's Open Government webpage.[1]

GOAL NO. 3: MAINTAINING HIGH STANDARDS OF STEWARDSHIP AND ACCOUNTABILITY

Accountability: Measuring and Monitoring Performance

PBGC continually monitors how well it performs and serves customers using a wide range of performance measures. Among them are how quickly and seamlessly the Corporation pays retirees, accurately calculates benefits and invests assets. PBGC conducts customer surveys to help improve coordination and cooperation, which are essential to meeting customer service goals.

Each quarter, PBGC leaders participate in data-driven discussions covering the Corporation's progress in operations, stewardship and accountability, customer satisfaction, and building and maintaining a model workplace. The strategic use of performance data better informs planning and execution of operations, as well as corporate and program area decision-making.

[1] https://www.pbgc.gov/open/index

FY 2018 SUMMARY OF PBGC MEASURES AND ACTIVITIES

	Target	2018	2017
Preserve Plans and Protect Pensions			
Participants Protected in Plans Emerging From Bankruptcy		52,000	26,700
Standard Termination Audits: Additional Payments		$12.2M to 4,157 people	$4.6M to 435 people
Pay Timely and Accurate Benefits			
Single-Employer –Participant Benefit Payments		861,000	840,000
Future Single-Employer – Participant Benefit Payments		532,000	552,000
Multiemployer Plan Financial Assistance – Number of Participants		62,300	63,000
Future Multiemployer Plan Financial Assistance – Number of Participants		27,800	30,000
Estimated Benefits Within 10 Percent of Final Calculation	95%	93%	93%
Average Time to Provide Benefit Determinations (Years)	4.3	6.1	6.2
Improper Payment Rates Within OMB Threshold[1]	<1.5%	Yes	Yes
Applications Processed in 45 Days	87%	91%	87%
Ensure Superior Stewardship and Accountability			
Retiree Satisfaction – ACSI[2]	90	89	91
Caller Satisfaction – ACSI	85	84	83
Premium Filer Satisfaction – ACSI	74	76	77
Overall Customer Satisfaction[3]	80	77	72
Financial Position (Deficit) – Single-Employer		$2.4B	($10.9B)
Financial Position (Deficit) – Multiemployer		($53.9B)	($65.1B)
Unmodified Financial Statement Audit Opinion	Yes	Yes	Yes

[1] The OMB threshold for significant improper payment reporting is as follows: amounts that exceed (1) both 1.5 percent and $10 million in improper payments, or (2) $100 million in improper payments.
[2] The American Customer Satisfaction Index (ACSI) uses a 0-100 scale; 80 or above is considered excellent.
[3] This measures customer satisfaction with information and services provided by the Corporation.

PBGC'S OWN FINANCES MUST BE SOUND

PBGC's operations are financed by insurance premiums set by Congress and paid by sponsors of defined benefit pension plans, along with investment income, assets from pension plans trusteed by PBGC and recoveries from the companies formerly responsible for the plans. PBGC receives no funds from taxpayer dollars. The Corporation pays benefits based on federal law and the provisions of the plans it trustees.

The financial status of the Single-Employer Program shows continuous improvement and reached a positive net position at the end of FY 2018. Estimates from PBGC's FY 2017 Projections Report indicate that continued improvement in the financial status of the Single-Employer Program is likely but not guaranteed. The net financial position of the Multiemployer Insurance Program also improved during FY 2018 but remains in deep deficit. Absent changes in law, the Multiemployer Program is likely to run out of money by the end of FY 2025.

Financial Soundness and Financial Integrity

PBGC is responsible for insuring the pensions of nearly 37 million people, whose benefits are valued at $3 trillion dollars. In addition to collecting premiums, PBGC exercises care in the management of over $100 billion in total assets. This year, PBGC attained the 26th consecutive unmodified audit opinion on its financial statements.

Collecting Premiums

In FY 2018, combined premium cash receipts collected totaled $6.6 billion. Single-Employer Program premium cash receipts collected were $6.3 billion. Separately, Multiemployer Program premium cash receipts were around $303 million. Premium rates are set by Congress and generally indexed for inflation. In addition, the Bipartisan Budget Act of 2013, the Multiemployer Pension Reform Act of 2014 and the Bipartisan Budget Act of 2015 specify premium rates or premium increases for certain years. In FY 2018, PBGC continued to improve its premium collection processes by sending acknowledgments for every premium filing received, which includes the results of processing the filings (e.g., notification of any balance due or overpaid). PBGC enhanced the collection process to identify suspended payments, addressed the correction of these payments and automatically followed up with plans to indicate that their payment had been processed properly. In addition, PBGC improved ACH and Fedwire processing to automatically post payments based on all available information in the payment file.

Investing Prudently

PBGC investment assets are administered by investment management firms subject to PBGC's investment policies and oversight procedures. Procedures for internal controls, due diligence and risk management are subject to periodic review. Regular and detailed communication with management firms enables the Corporation to stay informed on matters affecting its investment program. The following table provides a comparison of PBGC investment performance with each composite's respective benchmark. For more information, refer to Section VII Investment Activities.

PBGC FY 2018 INVESTMENT RETURNS VERSUS BENCHMARKS

	1-Year Period	3-Year Period	5-Year Period
Total Fund Composite	1.4%	5.8%	5.1%
Total Fund Benchmark [1]	1.0%	5.4%	4.8%
ERISA/ PPA Portfolio Benchmark[2]	10.1%	10.8%	9.3%
Total Global Public Stock	9.7%	13.5%	9.4%
Total Public Stock Benchmark[3]	9.1%	13.1%	9.0%
Total Global Bonds	(2.2%)	2.7%	3.5%
Total Global Bonds Benchmark[4]	(2.4%)	2.3%	3.2%

[1] The Total Fund Benchmark is a dynamic weighted benchmark based upon the weights of the Total Global Public Stock Benchmark, the Total Global Bonds Benchmark and the Total Money Market Securities Benchmark. This benchmark is utilized to compare against the Total Fund Composite returns shown above.

[2] The ERISA/PPA Portfolio Benchmark is based upon a hypothetical portfolio with a 60 percent allocation to the Standard & Poor's 500 equity index and a 40 percent allocation to the Bloomberg Barclays Aggregate Bond index. See Section VII Investment Activities (The Pension Protection Act of 2006 Reporting Requirement).

[3] The Total Global Public Stock Benchmark is a dynamic weighted benchmark based upon the weights of the U.S. Public Stock composite and the International Public Stock composite and the returns of their respective benchmarks.

[4] The Total Global Bonds Benchmark is a dynamic weighted benchmark based upon the weights of PBGC's fixed income managers and the returns of their respective benchmarks.

OUTREACH AND CUSTOMER SERVICE

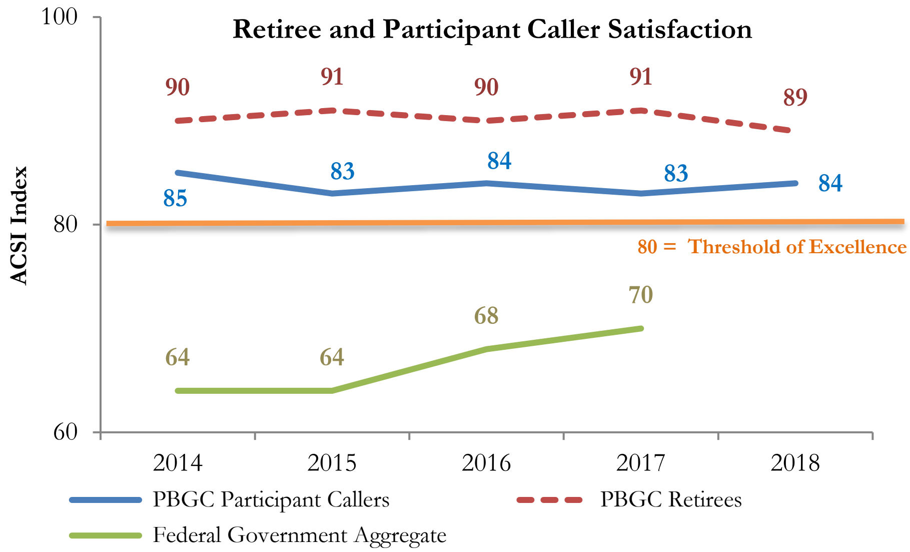
Listening to Customers

Customers are at the center of the Corporation's mission. PBGC management and employees consider customer interests when making decisions at every level. First, PBGC identifies and prioritizes customer needs through surveys that assess major processes and communications. The Corporation then sets targets to promote continued improvement in the areas that matter most to customers.

Telephone Surveys

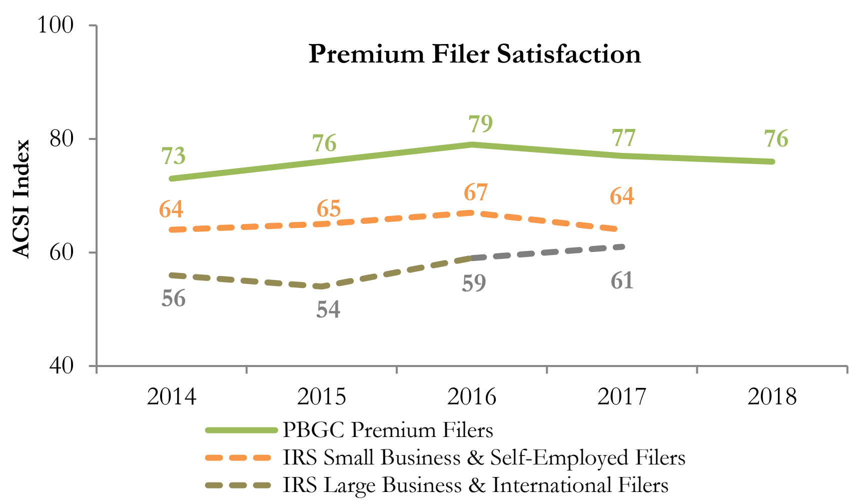
PBGC uses telephone surveys to get feedback from its customers — workers, retirees, employers and practitioners. The American Customer Satisfaction Index (ACSI) evaluates PBGC's services to this sector of customers. ACSI surveys use a proven statistical methodology to identify where the most effective improvements can be made and to allow benchmarking across public and private sectors.

The retiree survey measures satisfaction among retirees receiving monthly benefits from PBGC. This group rated its satisfaction at 89 in FY 2018, slightly below the target of 90 but among the highest in government or the private sector. Survey respondents indicated an appreciation of PBGC's dependable and timely payment of their PBGC benefits. Pending call center upgrades may help improve satisfaction in the coming years.



The participant caller survey measures the satisfaction of pension plan participants who call PBGC's toll-free number. Customers rate their call experience, including the automated phone system, interactions with representatives and resolution of their concerns. Other services, such as written communication or the benefit application process, are also evaluated. PBGC fell just slightly below its FY 2018 target of 85, scoring an 84 — up one point from last year. PBGC has invested in new Customer Contact Center technology to improve its customers' experiences and anticipates the first phase of implementation in FY 2019. To reduce call wait times, the Corporation also increased its number of call center agents.

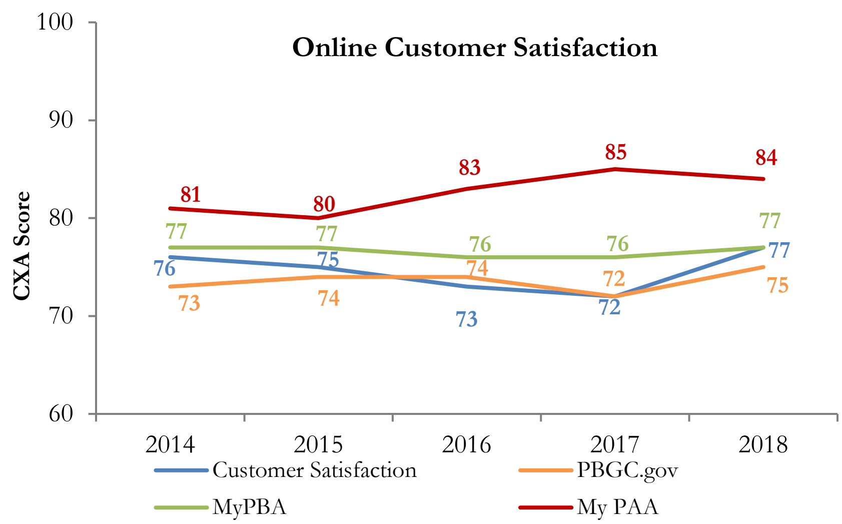
The premium filer survey measures satisfaction among plan sponsors and their representatives who file mandatory annual premiums with PBGC. The Corporation exceeded its FY 2018 target of 74 by two points, scoring 76, and was the highest-scoring regulatory agency among all agencies included in ACSI 2017 results. Although regulatory functions typically have lower satisfaction scores than service or benefit functions, PBGC has made special effort to listen to its premium filers and incorporate their views and input, particularly with respect to the online premium filing application, My PAA. PBGC also expanded its communications to premium filers in FY 2018 with timely email updates on important filing information.



Online Surveys

PBGC conducts four online surveys via PBGC.gov for measuring user satisfaction. These cover:

- Online service for participants using My Pension Benefit Account (MyPBA).
- Online service for practitioners using My Plan Administration Account (My PAA).
- The PBGC.gov website.
- Overall satisfaction of all customers.



These surveys provide valuable benchmarking insights and track trends in customer satisfaction. Online surveys continuously collect feedback, allowing PBGC to promptly address customer concerns.

Participants use MyPBA to conduct transactions with PBGC, such as applying for benefits, updating their addresses or banking information, specifying federal tax withholding or requesting benefit estimates. The MyPBA survey measures satisfaction in areas such as functionality, look and feel, and plain language. The MyPBA satisfaction score is 77, up one point from FY 2017 and meeting the target of 77.

Practitioners use My PAA to file premiums with PBGC. The My PAA survey measures satisfaction on issues like ease of navigation and site performance. The FY 2018 satisfaction score is 84, exceeding the target of 80. This score is among the highest in government. In FY 2018, My PAA added significant new functionality to improve the e-signature process if credits have changed since initial sign off, and to display on-screen validations for single filings uploads. Additional improvements included adding quick link buttons in My PAA to submit a request for penalty reconsiderations, premium refunds and other actionable requests; adding the ability to check the status of plan-specific requests and plan correspondence and allowing plan filers to save all PBGC mailed correspondence, which allows all filing team members to view documents in real time.

The PBGC.gov survey measures satisfaction with PBGC's public website, including search, navigation, content and plain language. The website satisfaction score was 75, meeting PBGC's target. The score reflects positive response to PBGC.gov's newest redesign, which implemented a less-cluttered layout and made it easier to navigate frequently accessed content, such as contact information and the MyPBA login page. PBGC also undertook a usability audit in FY 2018 that resulted in significant improvements to search functionality and navigation; both changes took place in the fourth quarter, so further increases in satisfaction are expected.

PBGC's customer satisfaction survey measures customer views on how well the Corporation performs its mission. This year, PBGC's score of 77 was below the target of 80, but up five points from last year. The website improvements contributed to this increase. PBGC also continues to communicate regularly with its customers via targeted newsletters, press releases, blog entries and social media.

Engaging With Customers and Stakeholders

PBGC works to keep its customers, stakeholders and constituents up to date on its activities through a variety of outreach efforts. In FY 2018, the Corporation enhanced its communications and outreach strategies by providing technical assistance to Congress on pension issues, increasing email campaigns and speaking engagements and improving PBGC.gov.

The Corporation communicates with Congress about the financial status and operations of PBGC programs and about matters that affect participant and employer constituents. In FY 2018, PBGC assisted Congress by providing technical assistance on a variety of legislative proposals.

In 2018, the Corporation increased its use of email, including sending regular participant communications in coordination with OBA and practitioner communications in coordination with the Financial Operations Department. PBGC continued to distribute its seasonal newsletters to retirees in PBGC trusteed plans and revamped its newsletter for future retirees. These newsletters reach hundreds of thousands of people, informing them about the benefits administration services PBGC provides.

Last year, PBGC launched the redesign of its website. Since then, PBGC has made continual improvements to PBGC.gov's navigation, security, search and overall usability. The Corporation bases its changes on customer feedback, user experience analysis and web best practices. PBGC continues to receive positive reviews from site visitors; customer satisfaction scores are also trending upward. The Corporation continues to enhance its website by regularly refreshing web copy and encouraging content owners to use plain language writing principles.

Many of PBGC's outreach efforts are focused on the pension community, including employer, practitioner and participant groups. To listen to their concerns and develop ways to enhance retirement security, PBGC met with groups such as AARP, the American Retirement Association, the American Benefits Council, the Committee on Investment of Employee Benefit Assets, the ERISA Industry Committee, the National Coordinating Committee for Multiemployer Plans, the National Retiree Legislative Network, the Pension Rights Center, the Women's Institute for a Secure Retirement, U.S. Chamber of Commerce and several organizations representing the actuarial profession.

In FY 2018, PBGC representatives attended 83 events, presenting at over 50 percent of these conferences and meetings. A diverse group of PBGC representatives shared in-depth knowledge on matters regarding multiemployer plans, risk transfers, single-employer plans, lifetime income and the expanded Missing Participants Program. PBGC's director served as keynote speaker or key presenter in nine stakeholder events, where he explained the status of the Corporation's services and programs.

SUSTAINING THE PROGRAMS

PBGC continually monitors and reports on its insurance programs and their effectiveness. The model used to accomplish this task is reviewed internally and by external experts. The Corporation implements strategies to strengthen its programs' financial health and improve its ability to manage risk.

Research and Analysis Activities

PBGC serves as an expert source of information about pensions and retirement policy. The Corporation's Policy, Research and Analysis Department (PRAD) delivers timely and accurate analysis of PBGC programs and policy alternatives to lawmakers, policymakers and external stakeholders.

Each year, PRAD updates the Pension Insurance Data Book, a compendium of data regarding PBGC and its Single-Employer and Multiemployer Programs. The 2016 data tables include statistics for PBGC's Single-Employer and Multiemployer Programs and for the private defined benefit pension system, including information specific to critical and declining status plans.

In addition, PBGC continues to study retirement experience as part of the review of its regulations that prescribe expected retirement ages. PRAD conducts various studies of employer-contribution and risk-transfer activity for purposes of its modeling program.

Improvements to the Pension Insurance Modeling System and Related Reports

PRAD's primary forecasting model is the Pension Insurance Modeling System (PIMS). In FY 2018, PRAD used the model to issue the annual Projections Report, which outlines the direction of PBGC's Single-Employer and Multiemployer Programs. The most recent Projections Report and other reports generated by PIMS are available on PBGC.gov.

Results of the PIMS projections are also incorporated into PBGC's determinations under MPRA as to whether providing early financial assistance through a partition or facilitated merger will impair PBGC's ability to assist other plans.

Outside experts review PIMS, and the model is periodically tested through a congressionally mandated peer review, required under the Moving Ahead for Progress in the 21st Century Act (MAP-21). This year, PBGC and its board agencies chose to perform targeted reviews to evaluate how PIMS models bankruptcy as it relates to single-employer and multiemployer sponsor participation, and whether the failure of a large multiemployer plan could cause failure of other multiemployer plans with common employers.

PBGC uses these reviews to improve PIMS and the Corporation's reports. PBGC also uses PIMS to illustrate the effects of proposed changes to pension law and to provide other technical assistance. PBGC has undertaken a multi-year effort to improve the speed and performance of PIMS; additional improvements are in progress.

Managing Enterprise Risk

As part of the Corporation's enterprise risk management (ERM) practices, PBGC's Risk Management Officer along with the Risk Management Council implemented a framework to assess and analyze risks across the Corporation. The framework is designed to accomplish the main purpose of ERM — providing managers and leaders with tools and risk information to make decisions. Additionally, the Corporation completed its FY 2018 risk profile and is working on mitigation strategies for top risks.

Regulatory Activities

PBGC continues to issue regulations to protect plan participants and minimize burdens on pension plans and plan sponsors.

- PBGC published a final rule to expand and update the Missing Participants Program. Under the expanded program, most terminated defined contribution plans can transfer the benefits of missing participants to PBGC or inform PBGC about other arrangements for distributing their benefits. PBGC's search efforts and its centralized online searchable database will help participants in terminated defined contribution plans find and receive the benefits being held for them. The final rule was published on December 22, 2017, and is available to plans that terminate beginning in 2018.
- PBGC published a final rule on facilitated multiemployer plan mergers. This final rule implements MPRA requirements for PBGC to facilitate mergers for seriously underfunded multiemployer plans. Such a merger can improve a plan's ability to survive and to continue paying benefits to participants.
- PBGC published a policy statement that provides insight to the public on the information PBGC finds helpful and factors PBGC considers in reviewing multiemployer plan proposals for alternative terms and conditions to satisfy withdrawal liability.

In FY 2018, PBGC also published:

- A proposed rule that would improve the efficiency of reporting and disclosure by terminated and/or insolvent multiemployer plans to PBGC and to participants and beneficiaries.
- An announcement changing the way PBGC provides relief from filing deadlines when there is a disaster. The revised policy streamlines PBGC's practice of announcing relief by keying it to the IRS' disaster relief news releases via a one-time Disaster Relief Announcement. Filers no longer have to wait for PBGC to issue separate announcements for a given disaster.
- A notice in the Federal Register soliciting nominations for appointment to PBGC's Advisory Committee.

STRENGTHENING A DIVERSE WORKFORCE AND LEADERSHIP

PBGC remains committed to maintaining a diverse and inclusive workplace while supporting succession and workforce planning activities. In FY 2018, the Corporation focused on strengthening employee performance management and increasing leadership engagement. PBGC has also made notable efforts to recruit and retain disabled veterans.

Federal Employee Viewpoint Survey

The Federal Employee Viewpoint Survey (FEVS) provides a confidential and voluntary method for PBGC federal employees to share honest and candid feedback about the work environment, work-life balance programs and other aspects of the Corporation. The survey also provides an opportunity for employees to influence change in their workplace. All federal employees are encouraged to take the survey. In FY 2018, 60 percent of PBGC's federal employees participated in the survey. Although this is a decrease from the FY

2017 participation rate of 69 percent, it is significantly higher than the 2018 government-wide participation rate of 46 percent.

According to the survey results, PBGC has an engaged workforce. The Corporation exceeded its 2018 FEVS engagement score target of 69, with a score of 79 percent — its highest FEVS engagement score. The engagement score measures responses to questions on how well leaders lead, the interpersonal employee/supervisor relationship and the level of employee motivation related to the employee's role in the workplace.

PBGC's leaders use the information from FEVS to gain valuable insight into the concerns of PBGC's greatest asset — its workforce. Reviewing the survey results is one of the ways the Corporation's leaders identify PBGC's strengths and challenges. This year's survey results can be found on PBGC.gov.

Management and Leadership Training

PBGC took a series of actions to enhance management and leadership competencies to include:

- Incorporating employee performance and conduct into the current supervisory performance management training module to address the Office of Management and Budget's "Comprehensive Plan for Reforming the Federal Government and Reducing the Federal Civilian Workforce."
- Launching a new management development series: The Mindful Solution: Finding Purpose, Balance and Synchronicity at Work and Creating an Environment of Civility, Respect and Well-being.
- Implementing a new training session called The Leadership Roundtable, which allows supervisors to openly discuss issues, concerns and best practices with senior leadership.

Recruitment and Outreach

The Corporation continues to promote recruitment and retention of disabled veterans through corporate and leadership training programs and recruitment efforts, including job fairs. This is the second fiscal year that PBGC has maintained a hiring rate of 3.3 percent for disabled veterans. Of those already on staff, 76 percent have remained with PBGC for over two years, 60 percent for over three years and 46 percent for more than four years.

Workforce and Succession Planning

Continuing with succession planning efforts to address workforce risk and loss of institutional knowledge, PBGC established metrics to identify departmental succession readiness. The metrics are reviewed quarterly by senior leadership. Sixty percent of PBGC departments have initiated or completed the succession planning process.

Diversity and Inclusion

PBGC's Diversity & Inclusion Council (employees, management, affinity groups and union) partnered with PBGC's director and the Communications, Outreach and Legislative Affairs Department to launch a "Small Acts of Inclusion" video, highlighting examples of inclusion and kindness in the workplace. The Council promoted the importance of inclusion during a Community Day event that showcased the Corporation's departmental and affinity group diversity. Employees in attendance learned about the Corporation's programs and how each contributes to PBGC's mission.

Equal Employment Opportunity

The Office of Equal Employment Opportunity (OEEO) is responsible for providing leadership in the development, implementation and evaluation of the Equal Employment Opportunity programs and services within the Corporation. The office provides technical guidance, advice and equal opportunity support services to PBGC employees and applicants regarding the federal government's equal opportunity program.

Essential to PBGC's mission, OEEO's Affirmative Employment Program (AEP) promotes equal employment opportunity by identifying and eliminating discriminatory practices and policies that impede progress for all workforce demographics.

The Affirmative Employment Program has facilitated or participated in events to support the continued development of a model EEO program. More notable events and activities include:

- Featured facilitator at PBGC's Library Speaker Series.
- Participated in PBGC's Diversity Day to inform the workforce of OEEO's efforts and to solicit ideas for collaboration.
- Sponsored a workshop on resume development that focused on preparing for emerging career opportunities within PBGC.
- Established an Education & Enrichment Book Club to discuss and understand differences in a diverse workplace.
- Hosted the Equal Employment Opportunity Commission Training Institute to train employees about respect and preventing harassment in the workplace.

OEEO produced the State of the Agency MD-715 report, which provides a high-level overview of PBGC's EEO program. The report is published and posted to PBGC.gov annually. The department also continued to conduct Barrier and Trend Analysis and created working relationships with each program office to support departmental EEO efforts.

In addition to attending OEEO's training courses, leaders were proactive in dealing with workplace issues and amenable to solving workplace disputes through mediation. In an effort to encourage participation in alternative dispute resolution, OEEO also sponsored the Federal Mediation and Conciliation Service to conduct a mock mediation session. As a result of these efforts, formal complaints continued to decline.

SAFEGUARDING CUSTOMERS' INTERESTS

Participant and Plan Sponsor Advocate

The PBGC Participant and Plan Sponsor Advocate is an independent entity within PBGC. The Advocate is selected by PBGC's Board of Directors and reports to PBGC's Board of Directors and Congress. The

Advocate acts as a liaison among PBGC, sponsors of insured defined benefit plans, and participants in PBGC-trusteed plans. The duties of the position include advocating for the full attainment of the rights of participants in trusteed plans, as well as assisting participants and plans sponsors in resolving disputes with the Corporation. The Advocate also identifies areas where participants and plan sponsors have persistent problems in dealings with PBGC and may propose changes in PBGC's administrative practices and recommend legislative changes to mitigate problems. The Advocate is statutorily required to submit an annual report to PBGC's congressional committees of jurisdiction, PBGC's Board of Directors, and PBGC's director.

The Advocate's latest annual report, issued on December 29, 2017, recognizes PBGC for handling large volumes of routine transactions exceptionally well. The report notes that under the direction of the current PBGC leadership, the Corporation made changes based on issues raised in prior Advocate Reports, such as the introduction of a pilot mediation program which has the potential to reduce the time and expense involved when negotiating with the agency. The report also highlights positive participant initiatives, including the publication of PBGC's Missing Participants final rule and interactions with participant advocacy groups and stakeholders. While these changes have a positive effect on PBGC's interactions with participants and plan sponsors, the Advocate recommends the Corporation consider a set of operating principles to further improve customer relations.

Strengthening E-Government and Information Technology

This year, the Office of Information Technology (OIT) published its 2018-2022 PBGC IT Strategic Plan. The IT Strategic Plan outlines how PBGC can meet its strategic goals and objectives by leveraging technology to maximize the administration's strategy and priorities for a secure digital government. OIT maintains secure, innovative, and cost-effective solutions. In FY 2018, OIT successfully:

- Achieved a 100 percent response rate for required quarterly and annual FISMA submissions to OMB and Congress for FY17 (during the FY 2018 reporting period).
- Exceeded OMB targets by achieving 98 percent performance for each of the Cybersecurity Cross Agency Priority goal targets.
- Achieved an overall "Managing Risk" grade for PBGC's FISMA Cybersecurity Framework Risk Management Assessment.
- Accomplished compliance with Department of Homeland Security (DHS) Binding Operational Directives 17-01, 18-01 and 18-02.
- Strengthened PBGC anti-phishing/malware defense capabilities based on the results of an independent DHS phishing capability assessment.
- Leveraged DHS's Continuous Diagnostics and Mitigation Program to implement a privileged account management system to reduce the likelihood and impact of a successful cyber attack.
- Implemented full disk encryption on all end-user computing hardware, reducing the risk of sensitive data loss.

Additional OIT achievements include improved openness and transparency, enhanced participation and oversight from PBGC's executives, adoption of cloud-based service offerings, and significant hardware and software modernization including:

- Migrating office documents to Microsoft Office 365.
- Implementing the Oracle database platform to migrate legacy databases to minimize disruption of mission critical systems.
- Consolidating desktop/laptop hardware in conjunction with Windows 10 upgrade.

Ensuring Ethical Practices

In FY 2018, PBGC continued to ensure that new employees received ethics training within 90 days of their date of hire, and that separating employees had the opportunity to meet with an ethics counselor to discuss the rules on post-employment activities. All public financial-disclosure filers and 98 percent of PBGC designated employees received annual ethics training by the end of the fiscal year. PBGC also hosted a presentation by the Office of Special Counsel's Hatch Act Unit Chief, who provided a Corporation-wide training on the Hatch Act, which limits federal employee participation in partisan political activity.

For internal outreach in FY 2018, PBGC's ethics team continued its "Ethics in Brief" email notices to all PBGC employees on various topics of interest. The ethics team also updated its intranet webpage and logo to further enhance agency outreach.

Protecting Privacy Interests

Among PBGC's highest priorities is protecting the personal information of its participants, beneficiaries, employees and contractors. In FY 2018, the Privacy Office continued the Corporation's transition from a compliance approach to privacy to a more risk-based approach. This work includes reviewing PBGC systems and processes to optimize the confidentiality, integrity and availability of the information PBGC maintains.

PBGC developed a joint Information Security and Privacy Awareness course for new hires and an annual refresher training course for current employees and contractors. The mandatory training was delivered in August 2018. The privacy team also hosted its annual Privacy Week. This event offered training, information about hot topics in the privacy field, Q&A sessions and a guest speaker. The Privacy Office provided role-based training on handling personally identifiable information to additional program offices. The Privacy Office also conducted its annual inventories of personally identifiable information on file, and routinely acts to reduce the use of Social Security numbers to the minimum extent necessary.

Strengthening Transparency and Disclosure

PBGC continues to be a leader throughout the federal government in strengthening and promoting transparency. At PBGC, every employee is responsible for ensuring compliance with the Freedom of Information Act (FOIA), a culture that is fostered by the Disclosure Division's training, outreach and awareness activities. In FY 2018, PBGC held 39 conferences or training sessions on a variety of topics to promote transparency, collaboration and compliance to ensure efficient and accurate processing of FOIA requests.

PBGC ended another fiscal year with a zero backlog of FOIA requests. Last year, the U.S. Department of Justice scored PBGC 100 percent when it assessed agencies that received more than 1,000 requests during the previous year. This year's accomplishments are a direct result of continued progress in the use of technology and human capital management using a multi-track business model, which assigns requests to specialized teams.

INDEPENDENT EVALUATION OF PBGC PROGRAMS

PBGC programs are regularly subjected to independent evaluations that help the Corporation remain true to its mission and accountable for services provided to the public. To maintain high standards of stewardship and accountability, PBGC continues to strengthen controls over operations, financial reporting and compliance with laws and regulations.

Office of Inspector General

PBGC places a strong emphasis on diligently addressing the Office of Inspector General's (OIG) audit recommendations. To facilitate timely completion and closure of such recommendations, regular status reports are issued to executive management to assist in monitoring corrective actions. Once work on recommendations is completed, evidence documenting the corrective actions taken is provided for OIG review.

PBGC is committed to addressing the related OIG recommendations in a timely manner. During FY 2018, PBGC reduced the number of open OIG recommendations from more than 180 in 2015 to 66, as of September 30, 2018. In FY 2018, PBGC closed nine recommendations related to three significant deficiencies.

PBGC's OIG oversaw the annual financial statement audit completed by an independent public accounting firm, CliftonLarsonAllen LLP. The Corporation attained the 26th consecutive unmodified audit opinion on its financial statements. In the report on Internal Control Related to the Pension Benefit Guaranty Corporation's Fiscal Year 2017 and 2016 Financial Statements Audit (AUD-2018-6), the OIG observed that PBGC strengthened its control environment by implementing management practices to mitigate control deficiencies reported in previous years. The OIG stated that management improved its current business processes to address specific financial reporting and information technology control deficiencies. In addition, the OIG stated that management should continue to focus its efforts to resolve outstanding conditions. In the report, the OIG identified the following three significant deficiencies: Controls over Present Value of Future Benefits Liability; Present Value of Nonrecoverable Future Financial Assistance; and Access Controls and Configuration Management. In addition, during FY 2018, the OIG performed other audits and evaluations, including the following:

- Evaluation of PBGC's Fiscal Year 2017 Compliance with Improper Payments Elimination and Recovery Act (EVAL-2018-12/PA-123). As required by the Improper Payments Information Act of 2002, the OIG reviewed PBGC's compliance with improper payment requirements. For FY 2017, PBGC performed a risk assessment on payments to federal employees and concluded that the payment stream was not susceptible to significant improper payments as defined in OMB Circular A-123, Appendix C. The OIG determined that PBGC was compliant with the applicable improper payment reporting requirements.

- DATA Act Implementation Audit: Opportunities Exist to Improve Data Quality (AUD-2018-01/PA-17-118). The OIG found that the Corporation generally complied with the requirements for completeness, timeliness, quality and accuracy of the data, and implementation and use of government-wide financial data standards established by OMB and Treasury. However, the OIG observed inconsistencies, omissions and errors, which caused the information available to the public and Congress on Beta.USAspending.gov to not fully reflect PBGC's operations. This occurred because PBGC relied on automated tools that included the DATA Act Processor, the exception reports, and the Broker to validate the data. The OIG made one recommendation in the report. Management promptly completed corrective action and the recommendation was closed.
- Evaluation of PBGC's Customer Service Score Goal-Sharing Awards Program. The OIG found that the goal-sharing award program, however well-intended, has not resulted in a significant and sustained improvement in overall customer satisfaction. The program is not effectively designed to provide the desired impact on the agency's mission—improved customer satisfaction. Although PBGC has met the goal at least once a year, PBGC has not reviewed the results of the incentive program to determine if the program is resulting in desired sustained improvements. The OIG recommend PBGC discontinue the goal-sharing program. PBGC agreed with the recommendation.
- Evaluation of Data protection for the Field Office Support Services Procurement (PA-18-125/SR 2018-15). The OIG issued a Risk Advisory informing PBGC of different data protection risk cultures and practices in the contractor-managed offices. To better safeguard participants' data and mitigate the risk of loss, the OIG suggested PBGC management promote a more uniform data protection risk culture by strengthening contract language in the pending Field Office Support Services procurement.

For more information about OIG's work in promoting accountability in PBGC operations, visit OIG.PBGC.gov.

Government Accountability Office

The Government Accountability Office's (GAO) latest high-risk report, dated February 2017,[1] continued to include PBGC's Single-Employer and Multiemployer Programs as one of 34 government programs most at risk due to vulnerabilities. The report underscores the risk of PBGC's Multiemployer Program being exhausted in less than 10 years as a result of projected pension plans insolvencies.

PBGC also monitors progress in addressing GAO recommendations. As of September 30, 2018, PBGC had only three open GAO recommendations relating to past reviews, and has requested closure on two of them, which have been fully addressed by PBGC. The Corporation provided GAO a response on the sole remaining recommendation.

For more information about GAO work on pensions and retirement security issues, visit GAO.gov.

[1] http://www.gao.gov/highrisk/pension_benefit/why_did_study

FINANCES

FISCAL YEAR 2018 FINANCIAL STATEMENT HIGHLIGHTS

The Pension Benefit Guaranty Corporation (PBGC or the Corporation) is a federal corporation established under the Employee Retirement Income Security Act (ERISA) of 1974, as amended. It guarantees payment of basic pension benefits earned by nearly 37 million of America's workers and retirees participating in more than 25,000 private-sector defined benefit pension plans. The Corporation receives no funds from general tax revenues. Operations are financed by insurance premiums set by Congress and paid by sponsors of defined benefit plans, investment income, assets from pension plans trusteed by PBGC, and recoveries from the companies formerly responsible for the plans.

FINANCIAL POSITION

PBGC Combined Financial Position

PBGC's combined net position improved by $24,529 million, decreasing the Corporation's combined deficit to $51,437 million as of September 30, 2018, from $75,966 million as of September 30, 2017. Results from operations in both the Single-Employer and Multiemployer Programs contributed to the improvement. The improved net position is largely due to $10,830 million in multiemployer credits from insolvent and probable plans, $7,773 million in credits due to change in interest factors, $5,848 million in premium and other income, and $1,450 million in investment income, offset by a $1,708 million charge due to expected interest. Combined actuarial credits totaled $6,615 million. PBGC uses a curve of one-year discount rates (interest factors). The curve of one-year discount rates (interest factors) for September 30, 2018, starts with an interest factor of 2.95% in year 1 and varies annually for each year thereafter until year 31 when the factor becomes 2.93% for the remaining years. The overall FY 2018 impact of the increase in interest factors was a favorable $13,600 million credit that consists of a $7,608 million credit from terminated single-employer plans, a $5,827 million credit from multiemployer probable plans, and a $165 million credit from insolvent multiemployer plans.

Multiemployer Financial Position

- The Multiemployer Program's net position improved by $11,176 million, decreasing its deficit to $53,876 million as of September 30, 2018. It is important to note that the Multiemployer Program's total assets remained essentially unchanged from FY 2017 to FY 2018 year-end, so nearly the entire $11,176 million improvement in the FY 2018 Multiemployer net position is the result of the program's total liabilities decreasing from $67,283 million in FY 2017 to $56,153 million at FY 2018 year-end.

  PBGC's most recent annual Projections Report (FY 2017) indicates that the program's risk of insolvency rises rapidly and is likely to occur by the end of FY 2025. When the program becomes insolvent, PBGC will be unable to provide financial assistance to pay the current level of guaranteed benefits in insolvent plans. At that time, the only money available to provide financial assistance will be incoming multiemployer premiums and thus PBGC will be only able to pay financial assistance to the extent of PBGC's multiemployer premium income.

- The $11,176 million decrease in the Multiemployer Program's deficit is primarily due to credits due to a change in interest factors (which was a result of increases in market interest rates) and other actuarial credits related to data changes (e.g., updated plan demographic information) and the use of actual rather than projected rates of return for the fiscal year. Credits from financial assistance for insolvent and probable plans were $10,830 million. The primary factors for this favorable credit were gains resulting from the change in interest factors of $5,827 million for identified multiemployer probable plans, credits due to data change of $2,050 million, credits from change due to use of actual rates of return rather than projected rates of return of $1,633 million, and the reclassification of seven plans previously classified as probable claims for $2,131 million. Five new plans with net claims of $450 million were added to the multiemployer inventory (including four multiemployer probable plans and one insolvent plan). Credits for insolvent plans (i.e., plans currently receiving financial assistance) included $165 million due to the change in interest factors and $22 million from actuarial adjustment credits, offset by a $40 million charge due to expected interest on accrued liabilities. Other factors that contributed to the Multiemployer Program's net gain are $292 million in net premium income, offset by $52 million in investment losses and $41 million in administrative expenses.

Single-Employer Financial Position

- The Single-Employer Program's FY 2018 net position improved by $13,353 million, eliminating the program's FY 2017 deficit resulting in a positive net position of $2,439 million as of September 30, 2018. The primary factors in the Single-Employer Program's FY 2018 net gain of $13,353 million included $7,608 million in favorable credits due to change in interest factors (which was a result of increases in market interest rates), $5,556 million in net premium and other income, a gain of $1,502 million in investment income, $528 million in credits from actuarial adjustments, and $322 million in credits from completed and probable terminations. These positive factors for the Single-Employer Program were offset by $1,668 million in charges due to expected interest related to PBGC's liabilities as of September 30, 2017 and $495 million in administrative, investment, and other expenses.

INVESTMENTS

- **Global Public Stock** – U.S. equities posted strong double digit returns in FY 2018. Developed non-U.S. equities generated positive returns but significantly underperformed U.S. equities in FY 2018, while Emerging Market equities posted slightly negative returns.

  For FY 2018, global equity market returns generated $2,733 million of investment income from equity investments compared to investment income of $4,453 million for FY 2017 (9.7% return for Total Global Public Stock in FY 2018 versus 17.6% in FY 2017).

- **Global Bonds** – The Treasury yield curve continued to rise in FY 2018, with yields at the short end of the curve rising more than yields at the longer end. Investment-grade bonds generally posted negative returns in FY 2018. Long-duration bonds underperformed shorter-duration bonds during FY 2018, and Government/Treasury bonds underperformed corporate bonds. High yield bonds posted positive returns, while emerging market debt declined.

  For FY 2018, global fixed income generated a loss of $1,484 million from fixed income investments compared to a gain of $571 million for FY 2017. This reflects lower fixed income returns (-2.2% return for Total Global Bonds in FY 2018 versus 0.7% in FY 2017).

- **Combined Investment Return** – FY 2018 investment returns contributed to a total PBGC combined investment gain of $1,450 million. PBGC's Total Fund Composite (excluding transition accounts) earned 1.4% in FY 2018, exceeding the Total Fund Benchmark return of 1.0%.

OPERATIONS

- PBGC's combined single-employer benefit payments and multiemployer financial assistance were $5,945 million in FY 2018 and $5,840 million in FY 2017. PBGC assumed responsibility for the benefit payments of an additional 28,000 workers and retirees in the 58 single-employer plans that were trusteed during FY 2018.
- FY 2018 combined net premium income decreased by $1,220 million to $5,810 million compared to FY 2017 net premium income of $7,030 million. The primary components of the combined net premium income are: (a) variable rate premium (VRP) income of $3,702 million, and: (b) flat rate premium income of $2,099 million. Overall, this represented a 17% year-to-year decrease in combined premium income and is largely due to improved conditions on the plans' underfunding (i.e., lower unfunded vested benefits), offset by higher premium rates for both the flat and variable rate premiums.
- During FY 2018, PBGC assumed financial responsibility for 74 underfunded single-employer plans that were terminated. Some of these plans are pending the completion of a trusteeship agreement with PBGC as of year-end. Because of PBGC's previous efforts to evaluate its exposure to probable terminations, $682 million of net claims for these plans were already reflected in PBGC's FY 2017 results. These 74 terminated plans had an average funded ratio of about 71%, and these terminations resulted in an aggregate net loss to PBGC of $1,291 million (see Note 12).
- There were no new single-employer plans classified as probable terminations in FY 2018. Probable terminations represent PBGC's best estimate of claims for plans that are likely to terminate in a future year.
- As of September 30, 2018, the present value of multiemployer nonrecoverable future financial assistance of $56,153 million consists of 78 insolvent plans ($2,394 million), 64 terminated plans not yet insolvent but probable ($1,652 million), and 42 ongoing plans that are projected to exhaust plan assets within 10 years and are classified as probable ($52,107 million) (see Note 7).

ESTIMATES OF REASONABLY POSSIBLE CONTINGENCIES

- At fiscal year-end, PBGC's estimate of its single-employer reasonably possible exposure decreased to $175,439 million in FY 2018, a $62,749 million decrease compared to $238,188 million in FY 2017. This decrease is primarily due to the decline in the number of companies with lower than investment grade bond ratings and/or credit scores.
- PBGC's estimate of its multiemployer reasonably possible exposure decreased to $9,410 million in FY 2018, a $4,562 million reduction from the $13,972 million in FY 2017. This decrease is primarily due to 14 plans that are no longer classified as reasonably possible (of these 14 plans, 12 were removed due to improvements in the plans' financial condition, and the 2 remaining plans were reclassified to other categories).

KEY SINGLE-EMPLOYER AND MULTIEMPLOYER RESULTS

(Dollars in millions)		**FY 2018**		FY 2017
Insurance Activity				
SINGLE-EMPLOYER AND MULTIEMPLOYER PROGRAMS COMBINED				
Single-employer Benefits Paid	**$**	**5,792**	$	5,699
Multiemployer Financial Assistance Paid	**$**	**153**	$	141
Retirees Receiving Benefits (at end of year)		**924,000**		903,000
Total Participants Receiving or Owed Benefits (at end of year)		**1,480,000**		1,485,000
New Underfunded Terminations		**74**		76
Terminated/Trusteed Plans (combined to date)		**4,929**		4,855
Plans That Have Received Financial Assistance		**78**		72
Summary of Operations				
SINGLE-EMPLOYER AND MULTIEMPLOYER PROGRAMS COMBINED				
Premium Income, Net	**$**	**5,810**	$	7,030
Losses (credits) From Completed and Probable Terminations	**$**	**(322)**	$	3,063
Losses (credits) From Financial Assistance	**$**	**(10,830)**	$	6,438
Investment Income	**$**	**1,450**	$	5,310
Actuarial Charges and Adjustments	**$**	**(6,615)**	$	(973)
Financial Position				
SINGLE-EMPLOYER AND MULTIEMPLOYER PROGRAMS COMBINED				
Total Assets	**$**	**112,252**	$	108,458
Total Liabilities	**$**	**163,689**	$	184,424
Net Income (Loss)	**$**	**24,529**	$	3,447
Net Position	**$**	**(51,437)**	$	(75,966)
SINGLE-EMPLOYER PROGRAM				
Total Assets	**$**	**109,941**	$	106,196
Total Liabilities	**$**	**107,502**	$	117,110
Net Income (Loss)	**$**	**13,353**	$	9,666
Net Position	**$**	**2,439**	$	(10,914)
MULTIEMPLOYER PROGRAM				
Total Assets	**$**	**2,311**	$	2,262
Total Liabilities	**$**	**56,187**	$	67,314
Net Income (Loss)	**$**	**11,176**	$	(6,219)
Net Position	**$**	**(53,876)**	$	(65,052)

FINANCIAL SUMMARY – SINGLE-EMPLOYER PROGRAM

(Dollars in millions)		Fiscal Year Ended September 30, **2018**	2017	2016	2015	2014	2013	2012	2011	2010	2009
Insurance Activity:											
Benefits paid	$	**5,792**	5,699	5,659	5,570	5,522	5,449	5,384	5,340	5,467	4,478
Participants receiving monthly benefits at end of year [1]		**861,371**	839,772	838,493	825,666	812,608	799,210	781,160	775,300	747,530	743,610
Plans trusteed and pending trusteeship by PBGC[2]		**4,919**	4,845	4,769	4,706	4,640	4,557	4,446	4,292	4,140	3,993
Summary of Operations:											
Premium income, net[3]	$	**5,518**	6,739	6,379	4,138	3,812	2,943	2,642	2,072	2,231	1,822
Other income	$	**38**	184	25	11	22	38	13	17	30	16
Investment income (loss)	$	**1,502**	5,363	8,648	324	6,439	2,741	8,792	3,446	7,594	6,330
Actuarial charges and adjustments (credits)	$	**(6,468)**	(950)	11,515	9,504	1,864	3,054	14,874	6,561	9,421	13,901
Losses (credits) from completed and probable termination	$	**(322)**	3,063	(417)	(780)	(115)	468	2,006	201	509	4,234
Administrative and investment expenses	$	**489**	481	465	446	464	434	443	424	449	417
Other expenses	$	**6**	26	4	30	17	5	-	21	(7)	15
Net income (loss)	$	**13,353**	9,666	3,485	(4,727)	8,043	1,761	(5,876)	(1,672)	(517)	(10,399)
Summary of Financial Position:											
Cash and investments[4]	$	**101,310**	96,830	89,596	80,090	81,215	77,881	76,941	71,292	69,150	62,062
Total assets	$	**109,941**	106,196	97,342	85,735	88,013	83,227	82,973	78,960	77,463	68,736
Present value of future benefits	$	**101,866**	111,280	113,704	106,926	102,774	105,018	105,635	92,953	90,022	83,035
Net position	$	**2,439**	(10,914)	(20,580)	(24,065)	(19,338)	(27,381)	(29,142)	(23,266)	(21,594)	(21,077)

[1] This measure may differ from yearly performance numbers reported in PBGC's Annual Performance Report, which also include participants whose benefit payments ended during the year (for example, due to death or a final lump-sum payout).
[2] These cumulative measures may differ due to plans that terminated in a prior year may have been removed from inventory in a subsequent year.
[3] Beginning in FY 2009, PBGC started to reflect premium income net of bad debt expense for premium, interest and penalties.
[4] Cash and investments consists of Cash and cash equivalents, Total investments, and Receivables, net: Investment income.

FINANCIAL SUMMARY – MULTIEMPLOYER PROGRAM

(Dollars in millions)		2018	2017	2016	Fiscal Year Ended September 30, 2015	2014	2013	2012	2011	2010	2009
Insurance Activity:											
Financial assistance paid	$	**153**	141	113	103	97	89	95	115	97	86
Plans that have received financial assistance [1]		**78**	72	65	57	53	44	49	49	50	43
Summary of Operations:											
Premium income, net [2]	$	**292**	291	282	212	122	110	92	92	93	95
Other income	$	**-**	-	-	-	-	-	-	-	-	2
Investment income (loss)	$	**(52)**	(53)	143	68	75	(96)	91	148	183	121
Actuarial charges and adjustments (credits)	$	**(147)**	(23)	167	135	95	41	164	99	-	-
Losses (credits) from insolvent and probable plans - financial assistance	$	**(10,830)**	6,438	6,768	9,963	34,260	2,969	2,466	1,461	831	614
Administrative and investment expenses	$	**41**	42	39	32	18	25	20	14	12	-
Net income (loss)	$	**11,176**	(6,219)	(6,549)	(9,850)	(34,176)	(3,021)	(2,467)	(1,334)	(567)	(396)
Summary of Financial Position:											
Cash and investments [3]	$	**2,137**	2,080	2,037	1,768	1,701	1,715	1,804	1,725	1,613	1,441
Total assets	$	**2,311**	2,262	2,204	1,924	1,769	1,719	1,807	1,739	1,628	1,459
Present value of future benefits	$	**-**	-	-	-	-	-	1	1	1	1
Nonrecoverable future financial assistance, present value	$	**56,153**	67,283	61,009	54,186	44,190	9,931	7,010	4,475	3,030	2,296
Net position	$	**(53,876)**	(65,052)	(58,833)	(52,284)	(42,434)	(8,258)	(5,237)	(2,770)	(1,436)	(869)

[1] 81 plans received financial assistance in FY 2018, 78 are expected to continue to receive financial assistance. Previously in FY 2017, 74 plans received financial assistance and as of September 30, 2017, there were 72 plans expected to continue to receive financial assistance.
[2] Beginning in FY 2009, PBGC started to reflect premium income net of bad debt expense for premium, interest and penalties.
[3] Cash and investments consists of Cash and cash equivalents, Total investments, and Receivables, net: Investment income.

As a general note, a dash "-" indicates no net activity to be reported.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF RESULTS OF OPERATIONS AND FINANCIAL POSITION

I. INTRODUCTION

PBGC management believes its discussion and analysis of its financial statements and other statistical data will help all interested parties and readers better understand PBGC's financial condition and results of operations. Readers should consider this material in conjunction with the Annual Performance Report starting on page 1, the financial statements beginning on page 57, and the accompanying notes beginning on page 61.

II. FINANCIAL AND PROGRAM RISKS

As of September 30, 2018, the Single-Employer and Multiemployer Programs reported net positions of $2,439 million and ($53,876) million, respectively. The Single-Employer Program's net position improved by $13,353 million, eliminating the program's deficit resulting in a positive net position of $2,439 million. (This is the first positive year-end net position for the Single-Employer Program since FY 2001.) The Multiemployer Program's net position improved by $11,176 million, decreasing its deficit to $53,876 million. Notwithstanding this combined deficit, the Corporation has $109,941 million in single-employer assets and $2,311 million in multiemployer assets and will be able to meet its obligations for a number of years. However, it is clear that the Multiemployer Program does not have the resources to fully satisfy its long-term obligations. PBGC's FY 2017 Projections Report shows that the risk of Multiemployer Program insolvency rises rapidly and is likely to occur by the end of FY 2025. (Please refer to Section V Overall Capital and Liquidity.)

In FY 2018, significant factors beyond PBGC's control (including the performance of financial markets, changes in interest rates, plan contributions made by sponsors, and recently enacted statutory and regulatory changes) will continue to influence PBGC's underwriting income and investment gains or losses. PBGC's best estimate of FY 2019 premium receipts ranges between $5,700 million and $6,000 million. No reasonable estimate can be made of FY 2019 terminations, effects of changes in interest rates, or investment income.

PBGC's operating results can change markedly from year to year depending on the severity of losses from plan terminations, investment performance, changes in the interest factors used to discount future benefit payments, general economic conditions, changes in law, and other factors. PBGC's operating results may vary more than those of most private insurers, in part because PBGC must insure against catastrophic risk without all the tools private insurers use to address risk. Most private insurers can diversify or reinsure their catastrophic risks or apply traditional insurance underwriting methods to these risks. Unlike private insurers, the Corporation cannot decline insurance coverage regardless of the potential risk posed by an insured. Private insurers can also adjust premiums in response to risk. PBGC cannot. PBGC's premiums are set by statute and Congress must approve any premium changes.

Claims against PBGC's insurance programs vary greatly from year to year. A single large pension plan termination or insolvency may result in a larger claim against the Corporation than the termination or insolvency of many smaller plans. So, future claims will continue to depend largely on the rare and unpredictable failures of a few very large plans. Additionally, PBGC's risks are concentrated in certain industries. Finally, PBGC's financial condition is also sensitive to market risk. Interest rates and equity returns affect not only PBGC's own assets and liabilities but also those of PBGC-insured plans.

III. LEGISLATIVE AND REGULATORY DEVELOPMENTS

LEGISLATIVE DEVELOPMENTS

Multiemployer Plans

PBGC Director W. Thomas Reeder testified on the structure and financial outlook of the PBGC before the House Committee on Education and the Workforce, Subcommittee on Health, Employment, Labor, and Pensions on November 30, 2017, and on May 17, 2018 before the newly created Joint Select Committee on Solvency of Multiemployer Pension Plans.

The Joint Select Committee on Solvency of Multiemployer Pension Plans (Select Committee) was created by the Bipartisan Budget Act of 2018 (P.L. 115-123), enacted on February 9, 2018. The Select Committee is tasked with providing recommendations and legislative language that will significantly improve the solvency of multiemployer pension plans and of the PBGC. The law calls for the committee to vote on a report and proposed legislative language to carry out the recommendations described in the report by November 30, 2018.

PBGC is supporting the Joint Select Committee in its important work. At the Committee's request, PBGC has detailed three multiemployer pension experts to the committee and is providing modelling and other technical assistance as the Select Committee's work proceeds.

Single-Employer Plans

Although no legislation affecting single-employer plans was enacted in FY 2018, premium increases for single-employer plans under the Bipartisan Budget Act of 2015 (P.L. 114-74) took effect in FY 2018. The single-employer annual flat rate premium for 2018 increased to $74 per participant from $69 for plan years beginning in 2017. The single-employer annual variable rate premium for 2018 increased to $38 per $1,000 of unfunded vested benefits capped at $523 from $34 capped at $517 for 2017.

REGULATORY REVIEW AND REFORM

In FY 2018, PBGC's regulatory priorities focused on enhancing the retirement security of workers and retirees and on reducing burdens on pension plans and plan sponsors. Although PBGC's regulations largely deal with transfer payments that are exempted from Executive Order 13771, PBGC is committed to seeking ways to reduce regulatory burden.

PBGC completed one of its top regulatory priorities of the fiscal year with the publication of its final rule to expand the Missing Participants Program (the Program) to help connect more participants with their lost retirement savings. As authorized by the Pension Protection Act of 2006, under the expanded Program, most terminated defined contribution plans can transfer the benefits of missing participants to PBGC or inform PBGC about other arrangements for distributing their benefits. Through PBGC's search efforts and its centralized online searchable database, the expanded Program helps participants find and receive the benefits being held for them. The Program is designed to cover terminated defined contribution plans, small professional service pension plans, and multiemployer plans that terminate on or after January 1, 2018.

In FY 2018, PBGC also published a final rule on facilitated multiemployer plan mergers. This rule implements the facilitated merger provisions under the Multiemployer Pension Reform Act of 2014 (MPRA) by providing procedural and informational requirements for requests for PBGC facilitation of a merger with financial or other assistance. Mergers facilitated with financial assistance must involve at least one multiemployer plan that is projected to become insolvent and result in a merged plan that will remain solvent. Mergers may provide greater stability by expanding the base of contributing employers and can reduce administrative costs and provide for more efficient investing.

In addition, PBGC also published in this fiscal year:

- A proposed rule to conform our regulations to changes in the phase-in rules for owner-participants under the Pension Protection Act of 2006 (PPA 2006).
- A proposed rule that would make reporting and disclosure by terminated and/or insolvent multiemployer plans to PBGC and participants and beneficiaries more efficient. The proposed rule also would require plan sponsors of terminated plans and insolvent plans to file their withdrawal liability information with PBGC so that PBGC can more precisely measure its Multiemployer Program liabilities.
- A policy statement that provides insight to the public on the information PBGC finds helpful and factors PBGC considers in reviewing multiemployer plan proposals for alternative terms and conditions to satisfy withdrawal liability.
- An announcement changing the way PBGC provides relief from filing deadlines when there is a disaster. The revised policy streamlines PBGC's practice of announcing relief by keying it to IRS' disaster relief news releases via a one-time Disaster Relief Announcement. Filers no longer have to wait for PBGC to issue a separate announcement for a given disaster.

IV. DISCUSSION OF INSURANCE PROGRAMS

PBGC operates two separate insurance programs for defined benefit plans. PBGC's Single-Employer Program guarantees basic pension benefits when underfunded plans terminate. By contrast, in the Multiemployer Program, the insured event is plan insolvency. PBGC's Multiemployer Program assists insolvent covered plans through financial assistance to pay benefits at the level the law guarantees.

By law, the two programs are funded and administered separately, and their financial conditions, results of operations, and cash flows are reported separately. The accompanying financial statements for both programs, which appear on pages 57-60, have been prepared in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP). Please refer to Note 2: "Significant Accounting Policies" for further detail, including a description of PBGC's valuation method used in determining benefit liabilities.

IV.A SINGLE-EMPLOYER PROGRAM RESULTS OF ACTIVITIES AND TRENDS

The Single-Employer Program covers about 26.2 million people (excluding those in plans that PBGC has trusteed), down from the 27.5 million people PBGC covered in FY 2017. The number of covered ongoing plans at the end of FY 2018 was about 24,000.

Plans that were terminated in a standard termination had sufficient funding to cover future benefits and distributed all plan benefits as insurance company annuities or lump sums pursuant to the standard termination rules of ERISA. In these cases, PBGC's activities are limited to ensuring compliance with standard termination regulations.

In contrast, PBGC becomes the trustee when a covered underfunded plan terminates. PBGC applies legal limits to payouts and pays the benefits. To determine the amount to pay each person, PBGC takes into account (a) the benefit that the participant had accrued in the terminated plan, (b) the availability of assets from the terminated plan to cover benefits, (c) how much PBGC recovers from employers for plan underfunding, and (d) the limits on guaranteed benefits provided under ERISA. The guarantee limits are indexed (i.e., they increase in proportion to increases in a specified Social Security wage index) and vary based on the participant's age and elected form of payment.

Because of indexing, the guarantee limits for plans that fail in calendar year 2019 will be 3.5% higher than the limits that applied for 2018 as shown below for sample ages:

MAXIMUM GUARANTEED ANNUAL BENEFIT PAYABLE AS A SINGLE LIFE ANNUITY

Age	Plans Terminating	Plans Terminating
70	$107,795	$111,710
65	$65,045	$67,295
60	$42,279	$43,742
55	$29,270	$30,283

The guarantee limit is a cap on what PBGC guarantees, not on what PBGC pays. In some cases, such as when PBGC recovers sufficient plan assets to pay more than just the maximum guarantee benefit, PBGC pays benefits above the guarantee limit.

The applicable maximum guarantee is determined by the year the retiree's plan terminated (if the plan terminated during the plan sponsor's bankruptcy, the year the sponsor entered bankruptcy), or the year when the participant begins collecting benefits if later.

Net income for the Single-Employer Program was $13,353 million in FY 2018. The primary drivers of this income included: credits of $7,608 million due to an increase in interest factors (which has the effect of decreasing benefit liabilities and actuarial charges), net premium income and other income of $5,556 million, investment income of $1,502 million, credits from actuarial adjustments of $528 million, and $322 million in credits from completed and probable terminations. This was offset by $1,668 million in actuarial charges due to expected interest on accrued liabilities, $372 million in administrative and other expenses, and $123 million in investment expenses.

PBGC's FY 2018 Single-Employer Program realized net income of $13,353 million compared to FY 2017 net income of $9,666 million. This favorable $3,687 million year-over-year change was primarily attributable to:

(1) a favorable change in actuarial charges due to change in interest factors of $5,425 million,
(2) an increase in favorable credits from completed and probable terminations of $3,385 million (see "Single-Employer Underwriting Activity" below),
(3) a decrease in actuarial charges due to expected interest of $864 million,
(4) a decrease in administrative, investment, and other expenses of $12 million,
(5) a decrease in investment income of $3,861 million (a gain of $1,502 million in FY 2018 compared to a gain of $5,363 million in FY 2017),
(6) a decrease in net premium and other income of $1,367 million, and
(7) a decrease in actuarial adjustments (credits) of $771 million.

Actuarial charges and adjustments arise from changes from mortality and retirement assumptions, changes in interest factors and expected interest. Expected interest refers to the interest that PBGC expects to accrue during the current fiscal year based on PBGC's liability and interest factors at the end of the prior year, with adjustments made for new plans and benefit payments made during the year.

SINGLE-EMPLOYER UNDERWRITING ACTIVITY

PBGC's Single-Employer Program realized a net underwriting gain of $6,034 million in FY 2018, $1,272 million more than the FY 2017 gain of $4,762 million. This $1,272 million increase from the previous year was primarily due to the $3,385 million increase in credits from completed and probable terminations and a $25 million decrease in administrative and other expenses, offset by the $1,367 million decrease in single-employer net premium and other income and $771 million unfavorable change in actuarial adjustments (credits).

Premium and other income from underwriting activity decreased (from $6,923 million in FY 2017 to $5,556 million in FY 2018), largely due to a decrease in net premium income from plan sponsors (from $6,739 million in FY 2017 to $5,518 million in FY 2018). The decrease in net premium income was largely due to improved conditions on the plans' underfunding (i.e. lower Unfunded Vested Benefits), offset by higher premium rates for both the flat and variable rate premiums. Other income, consisting of interest on recoveries from sponsors, decreased from $184 million in FY 2017 to $38 million in FY 2018.

Annual variable rate premium income, paid by underfunded single-employer plans, decreased by $1,246 million to a total of $3,702 million. The prior year's VRP rate of $34 per $1,000 of underfunding (capped at $517 per participant) increased to $38 per $1,000 of underfunding (capped at $523 per participant) for plan years beginning in 2018. Annual flat rate premiums for the Single-Employer Program increased from $69 to $74 per participant for plan years beginning in 2018, contributing to an increase in the flat rate premium income of $19 million to a total of $1,804 million.

A plan's present value of vested benefits for VRP purposes is determined using three "segment" rates without regard to the MAP-21 interest rate stabilization rules. The first of these applies to benefits expected to be paid within five years of the first day of the plan year, the second applies to the following 15 years, and the third applies to benefits expected to be paid after that.

The Treasury determines each segment rate monthly using the portion of a corporate bond yield curve that is based on corporate bonds maturing during that segment rate period. The corporate bond yield curve is also prescribed every month by the Treasury. It reflects the yields for the previous month on investment-grade corporate bonds with varying maturities that are in the top three quality levels. PBGC's regulation provides a few alternatives with respect to which month's rates are used and whether the segment rates are averaged over 24-months.

The Corporation's credits from completed and probable plan terminations increased from a loss of $3,063 million in FY 2017 to a credit of $322 million in FY 2018. The $322 million FY 2018 credit is due to $1,571 million decrease in probable claims and a credit of $42 million from revaluations of plans that had terminated in prior years, offset by $1,291 million for charges related to new plan terminations (see "Subtotal terminated plans" in Note 12).

The net claim for single-employer probable terminations as of September 30, 2018, was $1,799 million, while the net claim as of September 30, 2017, was $3,242 million. This $1,443 million decrease is due to the $786 million decrease in net claims of the two remaining probable plans and the termination of three probable plans with a net claim of $682 million. These factors were offset by an increase in the reserve for small unidentified probables of $25 million (see Note 6).

Single-employer administrative expenses decreased $5 million from $371 million in FY 2017 to $366 million in FY 2018.

In summary, the following key metrics describe the components of PBGC's single-employer present value of future benefits liability:

- $99,899 million – trusteed plans (4,878 plans),
- $150 million – plans pending termination and trusteeship (41 plans),
- $1,799 million – two probable plans and a reserve for small plans,
- During FY 2018, PBGC terminated 74 underfunded single-employer plans with a net claim of $1,291 million, with $682 million already accrued as probable.

SINGLE-EMPLOYER FINANCIAL ACTIVITY

Single-employer financial gain increased from $4,904 million in FY 2017 to a gain of $7,319 million in FY 2018. This is due to an increase of $6,289 million in actuarial credits, offset by a decrease of $3,861 million in investment income ($1,502 million in FY 2018 compared with $5,363 million in FY 2017), and an increase of $13 million in investment expense. PBGC marks its assets to market, which is consistent with the Financial Accounting Standards Board (FASB) Accounting Standards Codification Section 820, *Fair Value Measurements and Disclosures* (see Note 5).

Actuarial charges under financial activity represent the effects of changes in interest factors and the expected interest accrued on the present value of future benefits. The change in interest factors generally reflects the difference between the liability for future benefits of terminated plans at year-end when valued using updated interest factors compared to the liability when valued using the prior year's interest factors. A credit of $7,608 million to the single-employer expenses due to the change in interest factors occurred in FY 2018 due to an increase in the interest factors from FY 2017.

The expected interest refers to the interest that PBGC expects to accrue during the fiscal year on PBGC's liability at the end of the prior year based on the interest factor in effect at the beginning of the year. The interest factor in effect at the beginning of FY 2018 (1.54%) decreased compared to the factor at the beginning of FY 2017 (2.27%). The single-employer expected interest charges decreased in FY 2018 (from $2,532 million in FY 2017 to $1,668 million in FY 2018).

PBGC's single-employer Present Value of Future Benefits (PVFB) decreased from $111,280 million at September 30, 2017, to $101,866 million at September 30, 2018. PVFB represents the majority of PBGC's combined total liabilities of $163,689 million on its Statements of Financial Position.

PBGC discounts its liabilities for future benefits with interest factors[1] that, together with the mortality table used by PBGC, approximate the price in the private-sector annuity market at which a plan sponsor or PBGC could settle its obligations. PBGC uses an interest factor set that incorporates a curve of one-year discount rates (interest factors). The curve of one-year discount rates (interest factors) for September 30, 2018, starts with an interest factor of 2.95% in year 1 and varies annually for each year thereafter until year 31 when the factor becomes 2.93% for the remaining years. The curve of one-year discount rates (interest factors) for September 30, 2017 was 1.54% in year 1 and varied annually for each year thereafter until year 31 when the factor becomes 2.44% for the remaining years.

PBGC used the same mortality table updating the generational projection scale from MP-2016 used for September 30, 2017 to MP-2017 used for September 30, 2018 in determining future mortality rates. With the new projection scales, there was a general increase in mortality rates (reflects the adoption of a new mortality projection scale with shortening longevity) going from September 30, 2017, to September 30, 2018. Shorter longevity in the new mortality projection scale leads to a general decrease in the resulting liability. The impact to PVFB from these mortality assumption changes is included in the actuarial adjustments (credits) amount reported in the underwriting section of the Statements of Operations and Changes in Net Position.

IV.B MULTIEMPLOYER PROGRAM RESULTS OF ACTIVITIES AND TRENDS

The Multiemployer Program covers about 10.6 million participants in about 1,400 insured plans. A multiemployer plan is a pension plan sponsored by two or more unrelated employers under collective bargaining agreements with one or more unions. Multiemployer plans cover most unionized workers in the trucking, retail food, construction, mining, garment, and other industries. Workers accrue pension credits in the plan even when they change employment from one contributing employer to another. For a participant

[1] PBGC surveys life insurance industry annuity prices through the American Council of Life Insurers (ACLI) to obtain input needed to determine interest spread factors and then derives a 30 year curve of one-year rates that together with PBGC's mortality table will best match the private sector prices from surveys. Any curve of interest factors will generate liability amounts that differ from the survey prices, which cover 14 different ages or benefit timings for both male and female annuitants. The PBGC process derives the curve of interest factors that differs least over the range of prices in the survey. The derived rates in the curve are "spot" rates and then transformed into "forward" rates, because of the way they are applied in the present value calculations. For example, in a forward rate structure, discounting a payment due 25 years in the future requires use of 25 different rates, each associated with a one-year period, rather than by discounting using the single rate associated with year 25.

with 20 years of service, the maximum annual benefit guarantee is $8,580, which is much lower than for the participants under the Single-Employer Program.

Multiemployer plans are typically governed by a board of trustees appointed in equal numbers by labor and management. Under ERISA, the trustees have a fiduciary duty to act solely in the interest of participants and beneficiaries. Multiemployer plans are subject to ERISA minimum funding requirements with contributions held in a trust fund managed by the board to pay benefits and plan expenses. Assets do not revert to contributing employers. Although bargaining parties negotiate over plan contributions, they usually delegate plan design to the trustees.

Most collective bargaining agreements that cover multiemployer plans provide for contributions based on time worked in a covered job. Most plans base contributions on "number of hours worked." In some plans, benefits depend on the level of contributions that employers make to the plan for the participants' work.

Employers in multiemployer plans generally remain in the plan unless they go out of business, bargain out of the plan, or move their business out of the plan coverage area. If an employer withdraws from the plan, it may be assessed withdrawal liability. Withdrawal liability is generally based on the plan's unfunded vested benefits and the employer's share of contributions to the plan made by all contributing employers. In some instances, the employer may be assessed partial withdrawal liability.

PBGC does not trustee multiemployer plans. In the Multiemployer Program, the event triggering PBGC's guarantee is plan insolvency – the inability to pay guaranteed benefits when due. Insolvency usually occurs after all contributing employers have withdrawn from the plan, leaving the plan without a source of income. PBGC provides insolvent multiemployer plans with financial assistance, in the statutorily-required form of loans, sufficient to pay PBGC guaranteed benefits and reasonable administrative expenses. These loans generally continue until the plan no longer needs assistance or has paid all promised benefits at the guaranteed level. These loans are rarely repaid (and for that reason are fully reserved).

Benefits under the Multiemployer Program are calculated based on (a) the benefit a participant would have received under the insolvent plan, subject to (b) the legal multiemployer guarantee under ERISA. The guaranteed amount depends on the participant's years of service and the level of the benefit accruals. Monthly benefit accrual rates per year of service up to $11 are fully guaranteed; the portion of monthly benefit accrual rates between $11 and $44 is 75% guaranteed; monthly benefit accrual rates in excess of $44 are not guaranteed. For example, for a participant with 20 years of service, PBGC's guarantee would cover 100% of annual amounts up to $2,640 and partially cover amounts in excess of that not to exceed a total of $8,580 per year. Similarly, for a participant with 35 years of service, PBGC's guarantee would cover 100% of annual amounts up to $4,620 and partially cover amounts in excess of that not to exceed a total of $15,015 per year. The multiemployer guarantee limit has been in place since 2001.

As shown in the Statements of Financial Position on page 58, the liability for financial assistance that PBGC provides to the multiemployer plans fall into two categories under the classification "Present value of nonrecoverable future financial assistance." The first category listed is for "Insolvent plans" that have exhausted plan assets and are currently receiving financial assistance. The second category is for "Probable insolvent plans" representing plans that have terminated but not yet been determined to be insolvent (for the current year), as well as plans that are ongoing but PBGC expects these plans will exhaust plan assets and need financial assistance within the next 10 years.

During FY 2018, PBGC's obligations for future financial assistance to multiemployer plans decreased from $67,283 million at September 30, 2017, to $56,153 million at September 30, 2018, a decrease of $11,130 million (17% (see Note 7)).

MULTIEMPLOYER OVERALL FINANCIAL RESULTS

Results of the Multiemployer Program are reported in the Underwriting and Financial sections of the Statements of Operations and Changes in Net Position on page 59. The Multiemployer Program reported a net income of $11,176 million in FY 2018 compared with a net loss of $6,219 million in FY 2017. This resulted in an improved net position deficit of $53,876 million in FY 2018 compared with a net position deficit of $65,052 million in FY 2017. (The FY 2017 deficit was an all-time high for the Multiemployer Program.)

The improvement in net position is attributable to four key drivers impacting Multiemployer Program liabilities:

(1) A favorable change in the pension liability valuation interest factors generated a $5,993 million decrease in Multiemployer Program liabilities.
(2) Plan data changes (e.g., updated plan demographic information) resulted in a $2,060 million reduction in program liabilities.
(3) Recognition of actual rates of return for assets in FY 2018 rather than the projected rates available at the beginning of the year resulted in a $1,633 million reduction in program liabilities.
(4) Deletion of four probable plans and one insolvent plan from the multiemployer inventory of plans that resulted in a $1,577 million reduction in program liabilities.

PBGC uses a curve of one-year discount rates (interest factors) to value pension liabilities. The curve of one-year discount rates (interest factors) for September 30, 2018, starts with an interest factor of 2.95% in year 1 and varies annually for each year thereafter until year 31 when the factor becomes 2.93% for the remaining years. The curve of one-year discount rates (interest factors) for September 30, 2017, was 1.54% in year 1 and varied annually for each year thereafter until year 31 when the factor becomes 2.44% for the remaining years (See Note 6 on page 87 for additional information.)

During FY 2018, PBGC paid $153 million in financial assistance to 81 insolvent plans. At year-end there were 78 insolvent plans expected to continue to receive financial assistance covering 62,300 participants currently receiving benefits with an additional 27,800 people entitled to benefits once they retire. Comparatively in FY 2017, PBGC paid $141 million in financial assistance to 72 insolvent plans covering 63,000 participants in pay status at the time.

MULTIEMPLOYER UNDERWRITING ACTIVITY

As shown on the Statements of Operations and Changes in Net Position on page 59, underwriting activity reflected a net gain of $11,103 million in FY 2018. This was attributed to a $10,830 million gain from insolvent and probable plans - financial assistance (primarily due to favorable credits of $5,827 million from the change in interest factors, $2,050 million from data change, and $1,633 million from actual investment returns related to assets of multiemployer probable plans in contrast to projected investment returns), $292 million in net premium income, and $22 million in credits due to actuarial adjustments, offset by $41 million in administrative expense.

One key component of the significant change to present value of nonrecoverable future financial assistance (NRFFA) liability is the change in interest factors. The interest factor equivalent to the single effective rate changed from 2.48% to 3.14% on average, an increase of 66 basis points. This increase in interest factor, with a duration of 17.00 (duration is a measure of interest rate sensitivity which is the approximate percentage change in value for a 100 basis point change in rates), for multiemployer probable plans suggests a 10.9% decrease in NRFFA liability.

The multiemployer flat rate premium for plan years beginning in 2018 remained unchanged from the 2017 rate of $28 per participant. Net premium income increased by $1 million in FY 2018 to a total of $292 million from $291 million in FY 2017.

MULTIEMPLOYER FINANCIAL ACTIVITY

As shown on the Statements of Operations and Changes in Net Position on page 59, financial activity reflected a net gain of $73 million for FY 2018. This was attributed to a favorable credit of $165 million due to change in interest factors for plans known to be insolvent and have or are about to begin receiving financial assistance, offset by a $52 million loss from fixed income investments and a charge of $40 million due to expected interest. As required by law, Multiemployer Program investments consist of U.S. Treasury securities.

Multiemployer Program investments originate primarily from the cash receipts for premiums due from insured plans. PBGC is required to invest these premiums in obligations issued or guaranteed by the United States government.

Expected interest refers to the interest that PBGC expects to accrue during the fiscal year on PBGC's liability for plans known to be insolvent at the end of the prior year based on the interest factor in effect at the beginning of the year. The interest factor in effect at the beginning of FY 2018 (1.54%) decreased compared to the factor at the beginning of FY 2017 (2.27%). The multiemployer expected interest charges decreased in FY 2018 (from $62 million in FY 2017 to $40 million in FY 2018).

V. OVERALL CAPITAL AND LIQUIDITY

PBGC's obligations include monthly payments to participants and beneficiaries in terminated defined benefit plans, financial assistance to multiemployer plans, investment management fees, and the administrative operating expenses. The financial resources available to pay these obligations are underwriting income received from insured plan sponsors (largely premiums), the income earned on PBGC's investments and the assets taken over from failed plans.

The Corporation has sufficient liquidity to meet its obligations for a number of years; however, barring changes, the Multiemployer Program will with certainty not be able to fully satisfy its long-term obligations to plan participants. The FY 2017 Projections Report shows that the risk of Multiemployer Program insolvency rises rapidly and is likely to occur by the end of FY 2025.

FY 2018 combined premium cash receipts totaled $6,565 million, a decrease of $600 million from $7,165 million in FY 2017, due primarily to the decrease in premium revenue (resulting from improved conditions on the plans' underfunding, offset by higher premium rates for both the flat and variable rate premiums). Net cash flow used by investment activities decreased slightly to $2,900 million used in FY 2018 versus $2,920 million used in FY 2017. In FY 2018, PBGC's cash receipts of $9,930 million from operating activities of the Single-Employer Program were sufficient to cover its operating cash obligations of $6,882 million. This resulted in net cash provided by operating activities of $3,048 million (as compared to net cash provided by operating activities of $3,570 million in FY 2017). When the single-employer cash used through investing activities of $2,656 million is added to this net cash provided, the Single-Employer Program in the aggregate experienced a net cash increase of $392 million.

In the Multiemployer Program, cash receipts of $396 million from operating activities were sufficient to cover its operating cash obligations of $218 million, resulting in net cash provided by operations of $178 million. When this net cash provided is added to net cash used through investing activities of $244 million, the Multiemployer Program in the aggregate experienced an overall net cash decrease of $66 million.

During FY 2018, PBGC recovered $595 million through agreements with sponsors of terminated plans for unpaid contributions and unfunded benefits. A portion of those recovered funds are paid out as additional benefits to plan participants with nonguaranteed benefits according to statutory priorities.

In FY 2018, PBGC's combined net increase in cash and cash equivalents amounted to $326 million, arising from an increase of $392 million for the Single-Employer Program and a decrease of $66 million for the Multiemployer Program.

VI. SINGLE-EMPLOYER AND MULTIEMPLOYER PROGRAM EXPOSURE

PBGC estimates its single-employer loss exposure to reasonably possible terminations (e.g., underfunded plans sponsored by companies with credit ratings below investment grade) as $175,439 million at September 30, 2018, and $238,188 million at September 30, 2017. PBGC's exposure to loss may be less than these amounts because of the statutory guarantee limits on insured pensions, but PBGC is unable to estimate prospectively the extent and effect of the guarantee limitations. These estimates are measured as of December 31 of the previous year (see Note 9). For FY 2018, this exposure was concentrated in the following sectors: manufacturing (primarily automobile/auto parts and fabricated metals), transportation (primarily airlines)/communications/utilities, and services.

PBGC estimates that, as of September 30, 2018, it is reasonably possible that multiemployer plans may require future financial assistance of $9,410 million, compared to $13,972 million at September 30, 2017. This is primarily due to the decrease in liability from the removal of 14 plans totaling $5,524 million and increases in interest rates and a strong economy, which resulted in an increase in plan contributions and favorable returns on plan investments improving cash flows, offset by the addition of four new plans totaling $2,338 million.

The significant volatility in plan underfunding and sponsor credit quality over time makes long-term estimates of PBGC's expected claims uncertain. This volatility, along with the concentration of claims in a relatively small number of terminated plans, has characterized PBGC's experience to date and will likely continue. Factors such as economic conditions affecting interest rates, financial markets, and the rate of business failures will also influence PBGC's claims going forward.

PBGC's sources of information on plan underfunding are the most recent Section 4010 and PBGC premium filings, Form 5500, and other submissions to the Corporation. PBGC publishes Table S-49, "Various Measures of Underfunding in PBGC-Insured Plans," in its *Pension Insurance Data Book*. In that table the limitations of the estimates are fully and appropriately described.

In FY 2018, 1,601 plans filed standard terminations. The number of filings has increased this year; up from a 5-year average of 1,379. Some large plans that terminated in FY 2018 were those sponsored by AutoZone Inc., The Dana Corporation, Avery Dennison Corporation, and Sherwin-Williams Company.

Other large plans such as The Kroger Consolidated Retirement Benefit Plan, CVS Health Corporation Legacy Pension Plan, Community Hospitals of Indiana Inc. Retirement Plan, Abbott/Hospira Transitional Annuity Retirement Plan, First American Financial Corporation Pension Plan, Accenture United States Pension Plan, Bright House Networks Pension Plan, and Invensys Pension Plan completed previously filed standard terminations.

As in previous years, the majority of the plans that filed standard terminations were small plans with 300 or fewer participants.

There is an upward trend in the number of plans ending in a standard termination. Rising interest rates have reduced the cost of settling plan benefits either through purchase of an insurance company annuity or payment of a lump sum, resulting in an increase in plan terminations. The number of mid-size and large plan terminations is expected to continue to increase. Terminations of larger plans will significantly increase the workload associated with standard terminations.

VII. INVESTMENT ACTIVITIES

PBGC uses institutional investment management firms to invest its assets, subject to PBGC's oversight and consistent with the investment policy statement approved by our Board. PBGC does not determine the specific investments to be made, but instead relies on PBGC's investment managers' discretion in executing investments appropriate for their contractually assigned investment mandates. PBGC does ensure that each investment manager adheres to PBGC's prescribed investment guidelines associated with each investment mandate and measures each investment manager's performance in comparison with agreed-upon investment benchmarks.

PBGC's investment assets consist of premium revenues, which are accounted for in the revolving fund, and assets from trusteed plans and their sponsors, which are accounted for in the trust fund. By law, PBGC is required to invest certain revolving funds (i.e., Funds 1 and 2) in obligations issued or guaranteed by the United States government. Portions of the other revolving fund (i.e., Fund 7) can be invested in other debt obligations, but under PBGC's current investment policy these revolving funds are invested solely in Treasury securities (PBGC has never established funds 3, 4, 5 or 6, which ERISA authorized for special discretionary purposes). As required under MPRA, PBGC holds certain multiemployer premium amounts in non-interest-bearing accounts.

Total revolving fund investments, including cash and investment income, on September 30, 2018, were $33,245 million ($1,778 million for Fund 1, $2,137 million for Fund 2, and $29,330 million for Fund 7). Trust fund investments totaled $70,202 million as of September 30, 2018. At the end of FY 2018, PBGC's total investments consisting of cash and cash equivalents, investments, and investment income receivable as shown on the Statements of Financial Position were $103,447 million.

The investment policy objectives are to (1) satisfy existing liabilities and future claims when due, (2) maximize funded status within a prudent risk framework that is informed by PBGC's fixed obligations and asset composition of potential trusteed plans, and (3) utilize Liability Driven Investments techniques to minimize funded status volatility and the risk of future deficits.

PBGC's investment program had assets under performance management of $101,608 million as of September 30, 2018. Of the approximate $1,800 million difference between the September 30, 2018, investment assets reported on the Statements of Financial Position and the assets within PBGC's investment performance portfolio, approximately $500 million represent net unsettled purchases, $500 million for funds available for the following month's benefit payments, $400 million represent custodial bank holding accounts, and $400 million are newly trusteed assets that have not yet been commingled. Asset allocation percentages refer to the investments within PBGC's investment program that are subject to the Corporation's investment policy, as described below.

Cash and fixed income securities totaled about 70 percent of total assets under performance management invested at the end of FY 2018, compared with approximately 69 percent for FY 2017. Equity securities (i.e., public equities) represented 29 percent of total assets under performance management invested at the end of FY 2018, compared with about 30 percent at the end of FY 2017. The Total Fund Composite return (excluding private market assets and transition accounts) for FY 2018 was 1.4% compared with 5.6% in FY 2017. The returns reflect weaker bond market performance during the period. A small percentage of PBGC's investments are in the process of moving out of one of the manager portfolios (0.03 percent of total investment assets at the end of FY 2018, compared with 0.003 percent at the end of FY 2017) either for liquidation or for transfer to another manager. The return of the Total Fund Composite including these transition accounts was 1.3% in FY 2018, compared to 5.6% in FY 2017. Private markets assets, comprised largely of private equity, private debt, and private real estate that are currently part of PBGC's investment portfolio, represented about 0.7% of total investments at the end of FY 2018, compared with 0.9% of total investments at the end of FY 2017.

Due to the cyclical nature of capital markets, PBGC also reports five-year returns for its investment program. For the five-year period ending September 30, 2018, PBGC's annualized return on total invested funds excluding private market assets and transition accounts was 5.1% compared with a total fund benchmark return of 4.8% — a benchmark based on the relative weights of the underlying managed accounts. Including the transition accounts, the five-year annualized return was 5.1%. Separately, the annualized ERISA/PPA hypothetical portfolio benchmark return for the five-year period ending September 30, 2018, was 9.3%. (See section VII Investment Activities - The Pension Protection Act of 2006 Reporting Requirement.)

The table below summarizes the performance of PBGC's investment program.

INVESTMENT PERFORMANCE

(Annual Rates of Return)

	September 30, 2018	September 30, 2017	Three and Five Years Ended September 30, 2018: 3 yrs	Three and Five Years Ended September 30, 2018: 5 yrs
Total Fund Composite	**1.4%**	5.6%	5.8%	5.1%
Total Fund Benchmark [1]	**1.0**	5.0	5.4	4.8
ERISA/PPA Portfolio Benchmark [2]	**10.1**	10.9	10.8	9.3
Total Global Public Stock	**9.7**	17.6	13.5	9.4
Total Global Public Stock Benchmark [3]	**9.1**	17.2	13.1	9.0
Total Global Bonds	**(2.2)**	0.7	2.7	3.5
Total Global Bonds Benchmark [4]	**(2.4)**	0.1	2.3	3.2
Smaller Asset Managers Pilot Program [5]	**(0.8)**	0.7	n/a	n/a
Trust Funds	**3.0**	9.1	8.0	6.4
Revolving Funds	**(2.1)**	(2.0)	0.9	2.1
Indices				
Russell 3000 Index	**17.6**	18.7	17.1	13.5
MSCI ACWI ex-U.S. IMI Index	**1.8**	19.6	10.1	4.4
Dow Jones U.S. Select Real Estate Securities Index	**4.6**	(0.8)	6.9	9.1
Bloomberg Barclays Treasury Index	**(1.6)**	(1.7)	0.2	1.3
Bloomberg Barclays Aggregate Bond Index	**(1.2)**	0.1	1.3	2.2
Bloomberg Barclays Global Agg. (Hedged) Index	**0.8**	(0.2)	2.4	3.1

[1] The Total Fund Benchmark is a dynamic weighted benchmark based upon the weights of the Total Global Public Stock Benchmark, the Total Global Bonds Benchmark and the Total Money Market Securities Benchmark. This benchmark is utilized to compare against the Total Fund Composite returns shown above.

[2] The ERISA/PPA Portfolio Benchmark is based upon a hypothetical portfolio with a 60% allocation to the Standard & Poor's 500 equity index and a 40% allocation to the Bloomberg Barclays Aggregate Bond index. See section VII Investment Activities (The Pension Protection Act of 2006 Reporting Requirement).

[3] The Total Global Public Stock Benchmark is a dynamic weighted benchmark based upon the weights of the U.S. Public Stock composite and the International Public Stock composite and the returns of their respective benchmarks.

[4] The Total Global Bonds Benchmark is a dynamic weighted benchmark based upon the weights of PBGC's fixed income managers and the returns of their respective benchmarks.

[5] The performance inception date for the Smaller Asset Managers Pilot Program is August 2016. As such, three and five year performance is not yet available. This program is currently benchmarked against the Bloomberg Barclays Aggregate Bond index, shown within the Indices section.

FIXED INCOME

As described below, PBGC fixed income investment managers use a number of different benchmarks. Where applicable, the relative percentage that each index or benchmark represents for its respective asset class is provided. The percentage invested under each benchmark(s), in aggregate, for each asset class relative to the overall PBGC investment program as of September 30, 2018, is also parenthetically provided in the text below.

The Total Global Bonds Benchmark is a dynamic weighted benchmark based on the weights of the underlying fixed income managers and the returns of their respective benchmarks. As of September 30, 2018, the weighted benchmark encompasses the Completion Treasuries Benchmark (17.8%), the Non-Completion Treasuries Benchmark (37.4%), the Total Long Duration Bonds Benchmark (23.3%), the Bloomberg Barclays Aggregate Bond index (7.0%), the Total Developed Market Bonds Benchmark (1.2%), the Total High Yield Bonds Benchmark (4.5%), and the Total Emerging Market Bonds Benchmark (8.8%). The overall Total Global Bonds composite equals 66.3 percent of the total PBGC portfolio.

Completion Treasuries: This category includes investments in U.S. Treasury securities managed by outside professional asset managers and it applies to 11.8 percent of PBGC's investment program assets as of September 30, 2018. The assets of this category are split among the Revolving Fund (56.9%) and Trust Fund (43.1%). The objective of this category – in conjunction with the assets of the Non-Completion Treasuries, Long Duration, Core, Smaller Asset Manager Pilot Program, and Money Market Securities – is to hedge a portion of the single-employer liabilities. While PBGC can redeem composite assets upon request, those composite assets that are part of the Revolving Fund can only be redeemed to meet pension benefit obligations and administrative expenses.

Non-Completion Treasuries: This category includes investments in United States Dollar (USD) denominated fixed-income securities managed by outside professional asset managers and it applies to 24.8 percent of PBGC's investment program assets as of September 30, 2018. The Non-Completion Treasuries Benchmark encompasses the Bloomberg Barclays U.S. Long Treasury index (80.0%) and the Bloomberg Barclays U.S. Treasury Intermediate index (20.0%). The Non-Completion Treasuries Benchmark is a customized index made up of U.S. Treasury notes and bonds. While PBGC is able to redeem composite assets upon request, the composite assets are part of the Revolving Fund and can only be redeemed to meet pension benefit obligations and administrative expenses.

Long Duration: This category includes investments mainly in USD-denominated fixed income securities managed by outside professional asset managers and applies to 15.4 percent of PBGC's investment program assets as of September 30, 2018. The Total Long Duration Bonds Benchmark is a dynamic weighted benchmark based on the weights of the underlying Trust Fund long-duration fixed income managers and the returns of their respective benchmarks. As of September 30, 2018, the Total Long Duration Bonds Benchmark encompasses the Bloomberg Barclays Long U.S. Government/Credit index (13.8%), Bloomberg Barclays U.S. Long Credit index (3.7%) and Custom Benchmarks (82.5%). The Bloomberg Barclays Long U.S. Government/Credit index includes both government and credit securities. The government component includes public obligations of the U.S. Treasury that have remaining maturities of more than one year and publicly issued debt of U.S. Government agencies, quasi-federal corporations, and corporate or foreign debt guaranteed by the U.S. Government. The credit component of the index includes publicly issued U.S.

corporate and foreign debentures and secured notes that meet specified maturity, liquidity, and quality (investment grade) requirements. The Bloomberg Barclays U.S. Long Credit index includes investment-grade corporate debt and sovereign, supranational, local authority and non-U.S. agency bonds that are dollar denominated and have a remaining maturity of greater than or equal to 10 years. The custom benchmarks include similar securities and are weighted combinations of sub-sector benchmarks. PBGC is able to redeem composite assets upon request.

Core: This category includes investments primarily in USD-denominated fixed income securities managed by outside professional asset managers. It applies to 4.6 percent of PBGC's investment program assets as of September 30, 2018. The Core Fixed Income Benchmark is the Bloomberg Barclays Aggregate Bond index. The Bloomberg Barclays Aggregate Bond index includes securities that are registered with the Securities and Exchange Commission (SEC) and are taxable and dollar-denominated. The index covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, asset-backed securities, and foreign securities. PBGC is able to redeem composite assets upon request.

Developed Markets: This category includes investments in USD-denominated fixed income securities and fixed income securities denominated in other foreign currencies managed by outside professional asset managers. It applies to 0.8 percent of PBGC's investment program assets as of September 30, 2018. The Total Developed Market Bonds Benchmark is the Bloomberg Barclays Global Aggregate index hedged. The Bloomberg Barclays Global Aggregate index provides a broad-based measure of the global investment-grade fixed income markets. The three major components of this index are the U.S. Aggregate, the Pan-European Aggregate, and the Asian-Pacific Aggregate Indices. The index also includes Eurodollar and Euro-Yen corporate bonds, Canadian government, agency and corporate securities, and USD-denominated investment grade 144A securities. The hedged index negates exposure to foreign currencies by hedging currency exposure back to the U.S. dollar. PBGC is able to redeem composite assets upon request.

High Yield: This category includes investments primarily in USD-denominated fixed income securities managed by outside professional asset managers. It applies to 3.0 percent of PBGC's investment program assets as of September 30, 2018. The Total High Yield Bonds Benchmark is a dynamic weighted benchmark based on the weights of all high yield bond managers and the returns of their respective benchmarks. As of September 30, 2018, the weighted benchmark encompasses the Bloomberg Barclays U.S. High Yield Ba/B 1% Issuer Capped index (65.6%), the Bloomberg Barclays U.S. High Yield 2% Issuer Capped index (15.5%) and the Bloomberg Barclays U.S. High Yield Ba/B 2% Issuer Capped index (18.9%). The Bloomberg Barclays U.S. High Yield Ba/B 1% Issuer Capped index includes the universe of fixed rate, non-investment grade debt securities rated Ba or B. The index also includes Canadian and global bonds (SEC registered) of issuers in non-Emerging Market countries. The index limits the size of an individual issuer to 1% of the index. The Bloomberg Barclays U.S. High Yield 2% Issuer Capped index includes the universe of fixed rate, non-investment grade debt securities rated Ba-D. The index also includes Canadian and global bonds (SEC-registered) of issuers in non-Emerging Market countries. The index limits the size of an individual issuer to 2% of the index. The Bloomberg Barclays U.S. High Yield Ba/B 2% Issuer Capped index is identical to the Bloomberg Barclays U.S. High Yield Ba/B 1% Issuer Capped index, except it limits the size of an individual issuer to 2% of the index instead of 1% of the index. PBGC is able to redeem composite assets upon request.

<u>Emerging Market Bonds</u>: This category includes fixed income securities denominated in either U.S. dollars or foreign currencies and managed by outside professional asset managers. It makes up 5.9 percent of PBGC's investment program assets as of September 30, 2018. The Total Emerging Market Bonds Benchmark is a dynamic weighted benchmark based on the weights of all emerging market bond managers and the returns of their respective benchmarks. As of September 30, 2018, the weighted benchmark encompasses the JP Morgan EMBIG Diversified index (53.3%), JP Morgan GBI EM Global Diversified (4.6%) and Custom Benchmarks (42.1%). The custom benchmarks are weighted combinations of the JP Morgan EMBIG Diversified and the JP Morgan GBI EM Global Diversified indices. The JP Morgan EMBIG Diversified index includes USD-denominated debt instruments issued by Emerging Market countries. The index also includes USD-denominated Brady bonds, Eurobonds, and traded loans issued by sovereign and quasi-sovereign entities. The JP Morgan GBI EM Global Diversified index includes local currency or non-U.S. dollar-denominated debt instruments issued by Emerging Market countries. PBGC is able to redeem composite assets upon request.

MONEY MARKET SECURITIES

This category includes investments in money market instruments managed by an outside professional asset manager who invests in a diversified portfolio of short-term obligations and deposits, including, but not limited to, Treasury and agency obligations, certificates of deposits, commercial paper, and repurchase agreements (Trust Fund Cash). In addition, the category includes overnight investments in Treasury securities held at Treasury (Revolving Fund Cash). The Total Money Market Securities Benchmark is a dynamic weighted benchmark based on the weights of the Trust Fund Cash and the Revolving Fund Cash and the returns of their respective benchmarks. As of September 30, 2018, the weighted benchmark encompasses the 3-month Treasury bill (59.3%) and the 4-week Treasury bill (40.7%). The cash composite represents 3.0 percent of PBGC's investment program as of September 30, 2018. PBGC is able to redeem money market securities upon request.

GLOBAL PUBLIC STOCK

This category includes investments in the U.S. Public Stock composite and the International Public Stock composite and applies to 29.0 percent of PBGC's investment program assets as of September 30, 2018. The Total Global Public Stock Benchmark is a dynamic weighted benchmark based upon the weights of the U.S. Public Stock composite and the International Public Stock composite and the returns of their respective benchmarks. As of September 30, 2018, the Total Global Public Stock Benchmark comprises the Total U.S. Public Stock Benchmark (55.8%), and the Total International Public Stock Benchmark (44.2%). PBGC is able to redeem composite assets upon request.

<u>U.S. Public Stock:</u> This category includes investments in U.S. publicly traded equity securities and U.S. publicly traded real estate investment trusts (REITs) managed by outside professional asset managers. It applies to 16.2 percent of PBGC's investment program assets as of September 30, 2018. The Total U.S. Public Stock Benchmark is a dynamic weighted benchmark based upon the weights of the U.S. Public Stock managers and the returns of their respective benchmarks. As of September 30, 2018, the weighted benchmark comprises the Russell 3000 index (80.5%), the Dow Jones U.S. Select Real Estate Securities index (11.8%) and the FTSE NAREIT EQ REITs index (7.7%). PBGC is able to redeem composite assets upon request.

International Public Stock: This category includes investments in International Equity securities managed by outside professional asset managers. It applies to 12.8 percent of PBGC's investment program assets as of September 30, 2018. The Total International Public Stock Benchmark is a dynamic weighted benchmark based upon the weights of the international public stock managers and the returns of their respective benchmarks. As of September 30, 2018, the weighted benchmark encompasses the MSCI EAFE index (54.4%), MSCI EAFE IMI index (6.2%), the MSCI EAFE Small Cap index (9.3%), the MSCI Emerging Markets index (23.4%), and the MSCI Canada index (6.7%). The MSCI EAFE index (Europe, Australasia and Far East) is designed to measure the developed markets large and mid-capitalization equity performance, excluding the U.S. and Canada. The MSCI EAFE IMI index is designed to measure the developed markets large, mid and small capitalization equity performance, excluding the U.S. and Canada. The MSCI EAFE Small Cap index is designed to measure the developed markets small capitalization equity performance, excluding the U.S. and Canada. The MSCI Emerging Markets index is designed to measure equity market performance of emerging markets and the MSCI Canada index is designed to measure the equity market performance of Canada. PBGC is able to redeem composite assets upon request.

SMALLER ASSET MANAGERS PILOT PROGRAM

PBGC implemented the Smaller Asset Managers Pilot Program, which creates new opportunities for smaller asset managers who wish to compete for the agency's business. Five investment management firms were selected to participate in the pilot program and were funded in fiscal year 2016. This category includes investments primarily in USD-denominated fixed income securities managed by outside professional asset managers. It applies to 0.9 percent of PBGC's investment program assets as of September 30, 2018. The Smaller Asset Managers Pilot Program Benchmark is the Bloomberg Barclays Aggregate Bond index. The Bloomberg Barclays Aggregate Bond index includes securities that are SEC-registered, taxable, and dollar-denominated. The index covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, asset-backed securities, and foreign securities. PBGC is able to redeem composite assets upon request.

INHERITED PRIVATE MARKETS

This category includes private equity, private debt, and private real estate funds inherited from trusteed plans. These private market investments invest mainly in buyouts, venture capital, distressed debt, and commercial real estate. It applies to 0.7 percent of PBGC's investment program assets at year-end. Private investments are difficult to benchmark due to their illiquid nature. Typical benchmarks utilized for private equity include universe comparisons, where funds that have the same original investment date are compared against the performance of a similar fund. For direct private real estate investments, many institutions use the National Council of Real Estate Investment Funds (NCREIF) index, which includes U.S. commercial real estate properties acquired in the private market for investment purposes. For investments in private equity real estate, peer universe comparisons based on similar funds with the same original investment date are often utilized. Private market investments typically do not have redemption provisions; instead, the nature of the investments in this category is that distributions are received through the liquidation of the underlying assets of the funds. It is estimated that the majority of the underlying assets of the funds will be liquidated over the next five years. The fair values of the investments in this category have been estimated using the net asset value of PBGC's ownership interest in partners' capital.

THE PENSION PROTECTION ACT OF 2006 REPORTING REQUIREMENT

The Pension Protection Act of 2006 requires PBGC to estimate the effect of an asset allocation based on a combination of two commonly used market benchmarks. The hypothetical portfolio presented below (used as a benchmark for a typical pension plan), with a 60 percent allocation to the Standard & Poor's 500 equity index and a 40 percent allocation to the Bloomberg Barclays Aggregate Bond index, would have increased the assets of the Corporation by about $8.7 billion (10.1% return compared with PBGC's Total Fund Composite return including transition accounts of 1.3%) for the one-year period ending September 30, 2018, and increased the assets of the Corporation by about $21.4 billion (9.3% annualized return compared with PBGC's Total Fund Composite annualized return including transition accounts of 5.1%) over the five-year period ending September 30, 2018. PBGC invests its portfolio with a Liability-Driven Investment strategy and, therefore, the comparison to a typical pension plan with a 60% equity/40% fixed income is not necessarily a representative comparison. For further analysis of PBGC's Investment Activities please refer to the MD&A of Results of Operations and Financial Position. These results are summarized in the following table.

INVESTMENT PORTFOLIO ANALYSIS

60/40 Hypothetical Portfolio Analysis Versus PBGC Fiscal Year Actual Return
(60/40 comprises S&P 500 Index/Bloomberg Barclays Aggregate Bond Index)

	1-Year Period Ending			5-Year Period Ending		
Fiscal Year	60/40 Incremental $ Billions	60/40 % Return	PBGC Actual Return[1]	60/40 Incremental $ Billions	60/40 % Return	PBGC Actual Return[1]
9/30/2017	$5.1	10.9%	5.6%	$20.0	9.4%	5.3%
9/30/2018	$8.7	10.1%	1.3%	$21.4	9.3%	5.1%

[1] PBGC actual return is the PBGC's Total Fund Composite return including transition accounts.

ANALYSIS OF ENTITY'S SYSTEMS, CONTROLS AND LEGAL COMPLIANCE

PBGC maintains an Internal Controls Program designed to support compliance with the *Federal Managers' Financial Integrity Act* (FMFIA) and Office of Management and Budget (OMB) Circular A-123, *Management's Responsibility for Enterprise Risk Management and Internal Control*. PBGC has continued implementing the new requirements specified in the last revision to OMB Circular A-123 and, as noted below, performs a number of activities that serve to support the FMFIA Statement of Assurance. For FY 2018, PBGC provided an unmodified FMFIA Statement of Assurance.

INTERNAL CONTROL COMMITTEE

The PBGC Internal Control Committee (ICC) provides corporate oversight and accountability regarding internal controls over PBGC's operations, reporting, and compliance with laws and regulations. Chaired by the Chief Financial Officer, the committee includes members from each major area of the agency, including a representative of the OIG as a non-voting member. The ICC approves major changes to key financial reporting and entity-wide controls and PBGC systems, monitors the status of internal control deficiencies and related corrective actions, and considers other matters, including controls designed to prevent or detect fraud. The ICC coordinates with the Risk Management Council (RMC). In addition, the ICC continues to increase its focus on controls over operations, nonfinancial reporting, and compliance with laws and regulations, based on the updated OMB Circular A-123 requirements.

DOCUMENTATION AND TESTING OF CONTROLS

As part of the Internal Controls Program, controls are evaluated, on a test basis, to assess the adequacy of control design and the extent to which they are operating effectively. Results of the testing are provided to stakeholders within the agency, and corrective actions are recommended, where appropriate. Areas of focus include:

Standards for Internal Control in the Federal Government (Green Book): These standards, published by the GAO, represent guidance to be used by federal agencies in implementing effective internal control systems. In FY 2018, under ICC direction, management undertook a comprehensive review of the activities and controls supporting the Green Book's five internal control components and the 17 underlying control principles. At the same time, the ICC added key controls and cost-effectively enhanced other existing controls to ensure compliance with the GAO and OMB requirements.

Business Level Controls: Cycle memoranda documenting financial reporting controls within the following 12 major business process cycles were updated and approved during the fiscal year: Benefit Payments, Benefit Determinations, Budget and Finance, Financial Reporting, Human Resources/Payroll, Investments, Losses on Completed and Probable Terminations, Multiemployer, Procurement Accounts Payable and Related Expenses, Premiums, Single-Employer Contingent Liability, and Present Value of Future Benefits. The ICC has designated certain controls as key internal controls over financial reporting within each of these cycles, and employees responsible for performance of these controls are required to provide quarterly representations regarding the performance of those controls and to maintain evidence documenting control execution.

Entity-Wide Controls: These controls are overarching controls that support the overall effectiveness of PBGC's internal control environment. The ICC has designated certain controls as key entity-wide controls within the following six categories: control environment, risk assessment, control activities, information and communication, monitoring and anti-fraud. Many of these controls address the new Green Book categories of operational, non-financial reporting, and compliance.

Fraud Prevention: PBGC created a fraud risk profile and response plan as part of a continuing effort to fully implement GAO's Framework for Managing Fraud Risks in Federal Programs. The work started in FY 2016 and continued through FY 2018. The framework is focused on identifying and responding to fraud risks and developing control activities to prevent and detect fraud. The use of this framework is required under the Fraud Reduction and Data Analytics Act and OMB Circular A-123. To supplement the current controls already in place to help prevent fraud, the ICC is overseeing a continuing effort, supported by a data analytics contractor, to prevent and detect fraud.

Information Technology Controls: In order to protect the confidentiality, integrity, and availability of PBGC information systems and the information processed and stored by those systems, PBGC implements the controls included in the National Institute of Standards and Technology's Special Publication No. 800-53, *Security and Privacy Controls for Federal Information Systems and Organizations.* These controls are documented as part of System Security Plans which are maintained within the Cyber Security Assessment and Management (CSAM) tool managed by the Office of Technology's Enterprise Cybersecurity Division.

ASSESSMENT OF IMPROPER PAYMENT RISK

Based on the requirements of OMB Circular A-123, Appendix C, *Requirements for Effective Measurement and Remediation of Improper Payments*, and related improper payment legislation, PBGC performed a risk assessment in FY 2018 for premium refunds and benefit payments. Please refer to the Improper Payment Assessment section of this report for additional information.

AUDIT COORDINATION AND FOLLOW-UP PROGRAM

In implementing OMB Circular A-50, PBGC has established its *Audit Coordination and Follow-up Directive*. It is PBGC policy to fully cooperate with audits of PBGC operations and ensure the efficient tracking, resolution, and implementation of agreed-upon audit recommendations contained in audit reports issued by OIG and the GAO. PBGC has dedicated staff to coordinate with OIG and GAO audit representatives in providing access to records and information needed to complete audits and ensure that management responses to draft reports are provided in a timely manner. To facilitate timely completion and closure of audit recommendations, staff regularly monitors implementation efforts, including regular distribution of audit follow-up status reports to executive management via a corporate-wide portal and formal submission of documentation evidencing completion of required corrective actions. Status reports are used to document planned corrective actions and estimated completion dates; they also indicate those recommendations for which work has been completed and reported as such to the OIG and to GAO. In addition, PBGC prepares a management report in response to the Semiannual Report to Congress (SARC) issued by the OIG, which addresses the status of agreed-upon OIG recommendations and provides other information required under the Inspector General Act of 1978, as amended.

COMPLIANCE WITH LAWS, REGULATIONS, AND OTHER REQUIREMENTS

To foster an environment that promotes compliance with laws and regulations, PBGC maintains two legal compendia: the *Compendium of Laws* lists statutes that may have a significant impact on PBGC's financial statements or PBGC operations, and the *Compendium of Executive Orders and OMB Requirements* lists other requirements applicable to PBGC. These documents provide brief descriptions of each applicable requirement and identify the PBGC department or other component with primary compliance responsibility. PBGC updates and maintains these lists to help ensure compliance with applicable laws, regulations, and other requirements. In addition, the ICC improved PBGC's control environment by adding specific compliance controls and augmenting other controls to underscore their compliance aspect.

Following up on potential compliance issues reported last year with respect to our leases, PBGC is working with OMB on a draft Antideficiency Act (ADA) report regarding one lease, for external reporting, if necessary. PBGC has analyzed all remaining leases and, while recording issues were noted, determined the additional leases to be in compliance with ADA requirements. Further, there were no new ADA violations identified and/or reported in FY 2018.

ENTERPRISE RISK MANAGEMENT ACTIVITIES

As part of the Corporation's Enterprise Risk Management (ERM) activities, the Risk Management Council (RMC)—chaired by the Risk Management Officer—developed a preliminary framework to assess and analyze risks across the Corporation. The RMC also made progress in documenting a common terminology for the Corporation's ERM effort. In FY 2018, the RMC continued to refine, implement, and document this methodology to accomplish the main purpose of Enterprise Risk Management—providing managers and leaders with tools and risk information on which to make decisions. PBGC engaged in Chief Officer-level risk assessments that informed its FY 2018 Risk Profile. Moreover, the RMC met with the risk owners who are working on mitigation strategies for PBGC's top risks.

FEDERAL MANAGERS' FINANCIAL INTEGRITY ACT (FMFIA) ASSURANCE STATEMENT PROCESS

The heads of departments, offices and other select work units within PBGC performed assessments of internal controls over operations, reporting (financial and nonfinancial), and compliance with laws and regulations. These assessments addressed several different considerations affecting internal controls, such as existence of policies and procedures, extent of management oversight, performance of internal compliance reviews, results of external reviews (e.g., OIG, GAO, or other reviews), and evaluation of known internal control deficiencies. In addition, the ICC prepared a list of cross-cutting control issues for consideration by members of PBGC's executive management. Based on the results of the completed assessments and other relevant factors, PBGC's executive management recommended, and the Director approved, the FY 2018 FMFIA Statement of Assurance.

FEDERAL MANAGERS' FINANCIAL INTEGRITY ACT STATEMENT OF ASSURANCE

The PBGC's management is responsible for managing risks and maintaining effective internal control to meet the objectives of Sections 2 and 4 of the Federal Managers' Financial Integrity Act. (Section 2 covers objectives related to control over both financial reporting and operations. Section 4 addresses compliance with federal financial management systems.)

The PBGC conducted its assessment of risk and internal control in accordance with OMB Circular No. A-123, *Management's Responsibility for Enterprise Risk Management and Internal Control*. Based on the results of the assessment, the PBGC can provide reasonable assurance that internal control over operations, reporting, and compliance was operating effectively as of September 30, 2018.

MANAGEMENT REPRESENTATION

PBGC's management is responsible for the accompanying Statements of Financial Position of the Single-Employer and Multiemployer Funds as of September 30, 2018, and September 30, 2017, the related Statements of Operations and Changes in Net Position, and the Statements of Cash Flows for the years then ended. PBGC's management is also responsible for establishing and maintaining systems of internal accounting and administrative controls that provide reasonable assurance that the control objectives (i.e., preparing reliable financial statements, safeguarding assets, and complying with laws and regulations) are achieved.

PBGC management believes the financial statements of the Single-Employer and Multiemployer Program Funds present fairly in all material respects the financial position of PBGC as of September 30, 2018, and September 30, 2017, and the results of its operations and cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America (U.S. GAAP) and actuarial standards applied on a consistent basis. As noted in the FMFIA Statement of Assurance above, PBGC provides reasonable assurance that its internal controls are effective.

Estimates of probable terminations, nonrecoverable future financial assistance, amounts due from employers, and the present value of future benefits have a material effect on the financial results being reported. Litigation has been disclosed and reported in accordance with U.S. GAAP.

As a result of the aforementioned, PBGC has based these statements, in part, upon informed judgments and estimates for those transactions not yet complete or for which the ultimate effects cannot be precisely measured, or for those that are subject to the effects of any pending litigation.

The Inspector General engaged CliftonLarsonAllen LLP to conduct the audit of the Corporation's fiscal years 2018 and 2017 financial statements, and CliftonLarsonAllen LLP issued an unmodified opinion on those financial statements.

WTReeder

W. Thomas Reeder
Director

Patricia Kelly

Patricia Kelly
Chief Financial Officer

November 15, 2018

PENSION BENEFIT GUARANTY CORPORATION

STATEMENTS OF FINANCIAL POSITION

	Single-Employer Program		Multiemployer Program		Memorandum Total	
	September 30,		September 30,		September 30,	
(Dollars in Millions)	**2018**	2017	**2018**	2017	**2018**	2017
ASSETS						
Cash and cash equivalents	**$5,577**	$ 5,185	**$83**	$ 149	**$5,660**	$ 5,334
Securities lending collateral (Notes 3 and 5)	**4,010**	3,106	**-**	-	**4,010**	3,106
Investments, at market (Notes 3 and 5):						
Fixed maturity securities	**64,527**	60,666	**2,035**	1,921	**66,562**	62,587
Equity securities	**26,613**	26,748	**-**	-	**26,613**	26,748
Private equity	**510**	606	**-**	-	**510**	606
Real estate and real estate investment trusts	**3,428**	3,114	**-**	-	**3,428**	3,114
Other	**7**	16	**-**	-	**7**	16
Total investments	**95,085**	91,150	**2,035**	1,921	**97,120**	93,071
Receivables, net:						
Sponsors of terminated plans	**21**	17	**-**	-	**21**	17
Premiums (Note 11)	**3,600**	4,439	**172**	180	**3,772**	4,619
Sale of securities	**523**	1,555	**-**	-	**523**	1,555
Derivative contracts (Note 4)	**449**	212	**-**	-	**449**	212
Investment income	**648**	495	**19**	10	**667**	505
Other	**4**	5	**-**	-	**4**	5
Total receivables	**5,245**	6,723	**191**	190	**5,436**	6,913
Capitalized assets, net	**24**	32	**2**	2	**26**	34
Total assets	**$109,941**	$106,196	**$2,311**	$2,262	**$112,252**	$108,458

The accompanying notes are an integral part of these financial statements.

PENSION BENEFIT GUARANTY CORPORATION

STATEMENTS OF FINANCIAL POSITION

	Single-Employer Program		Multiemployer Program		Memorandum Total	
	September 30,		September 30,		September 30,	
(Dollars in Millions)	**2018**	2017	**2018**	2017	**2018**	2017
LIABILITIES						
Present value of future benefits, net (Note 6):						
Trusted plans	**$99,899**	$ 107,974	**-**	-	**$99,899**	$ 107,974
Plans pending termination and trusteeship	**150**	46	**-**	-	**150**	46
Settlements and judgments	**18**	18	**-**	-	**18**	18
Claims for probable terminations	**1,799**	3,242	**-**	-	**1,799**	3,242
Total present value of future benefits, net	**101,866**	111,280	**-**	-	**101,866**	111,280
Present value of nonrecoverable future financial assistance (Note 7)						
Insolvent plans	**-**	-	**2,394**	2,662	**2,394**	2,662
Probable insolvent plans	**-**	-	**53,759**	64,621	**53,759**	64,621
Total present value of nonrecoverable future financial assistance	**-**	-	**56,153**	67,283	**56,153**	67,283
Payables, net:						
Derivative contracts (Note 4)	**430**	161	**-**	-	**430**	161
Due for purchases of securities	**1,019**	2,290	**-**	-	**1,019**	2,290
Payable upon return of securities loaned	**4,010**	3,106	**-**	-	**4,010**	3,106
Unearned premiums	**125**	221	**11**	8	**136**	229
Accounts payable and accrued expenses (Note 8)	**52**	52	**23**	23	**75**	75
Total payables	**5,636**	5,830	**34**	31	**5,670**	5,861
Total liabilities	**107,502**	117,110	**56,187**	67,314	**163,689**	184,424
Net position	**2,439**	(10,914)	**(53,876)**	(65,052)	**(51,437)**	(75,966)
Total liabilities and net position	**$109,941**	$ 106,196	**$2,311**	$2,262	**$112,252**	$ 108,458

The accompanying notes are an integral part of these financial statements.

PENSION BENEFIT GUARANTY CORPORATION

STATEMENTS OF OPERATIONS AND CHANGES IN NET POSITION

	Single-Employer Program		Multiemployer Program		Memorandum Total	
	For the Years Ended September 30,		For the Years Ended September 30,		For the Years Ended September 30,	
(Dollars in Millions)	**2018**	2017	**2018**	2017	**2018**	2017
UNDERWRITING:						
Income:						
Premium, net (Note 11)	**$5,518**	$ 6,739	**$292**	$ 291	**$5,810**	$ 7,030
Other	**38**	184	**-**	-	**38**	184
Total	**5,556**	6,923	**292**	291	**5,848**	7,214
Expenses:						
Administrative	**366**	371	**41**	42	**407**	413
Other	**6**	26	**-**	-	**6**	26
Total	**372**	397	**41**	42	**413**	439
Other underwriting activity:						
Losses (credits) from completed and probable terminations (Note 12)	**(322)**	3,063	**-**	-	**(322)**	3,063
Losses (credits) from insolvent and probable plans-financial assistance (Note 7)	**-**	-	**(10,830)**	6,438	**(10,830)**	6,438
Actuarial adjustments (credits) (Note 6)	**(528)**	(1,299)	**(22)**	(40)	**(550)**	(1,339)
Total	**(850)**	1,764	**(10,852)**	6,398	**(11,702)**	8,162
Underwriting gain (loss)	**6,034**	4,762	**11,103**	(6,149)	**17,137**	(1,387)
FINANCIAL:						
Investment income (loss) (Note 13):						
Fixed	**(1,432)**	624	**(52)**	(53)	**(1,484)**	571
Equity	**2,733**	4,453	**-**	-	**2,733**	4,453
Private equity	**93**	129	**-**	-	**93**	129
Real estate	**105**	145	**-**	-	**105**	145
Other	**3**	12	**-**	-	**3**	12
Total	**1,502**	5,363	**(52)**	(53)	**1,450**	5,310
Expenses:						
Investment	**123**	110	**-**	-	**123**	110
Actuarial charges (Note 6):						
Due to expected interest	**1,668**	2,532	**40**	62	**1,708**	2,594
Due to change in interest factors	**(7,608)**	(2,183)	**(165)**	(45)	**(7,773)**	(2,228)
Total	**(5,817)**	459	**(125)**	17	**(5,942)**	476
Financial gain (loss)	**7,319**	4,904	**73**	(70)	**7,392**	4,834
Net income (loss)	**13,353**	9,666	**11,176**	(6,219)	**24,529**	3,447
Net position, beginning of year	**(10,914)**	(20,580)	**(65,052)**	(58,833)	**(75,966)**	(79,413)
Net position, end of year	**$2,439**	($10,914)	**($53,876)**	($65,052)	**($51,437)**	$ (75,966)

The accompanying notes are an integral part of these financial statements.

PENSION BENEFIT GUARANTY CORPORATION

STATEMENTS OF CASH FLOWS

(Dollars in millions)	Single-Employer Program For the Years Ended September 30, 2018	2017	Multiemployer Program For the Years Ended September 30, 2018	2017	Memorandum Total For the Years Ended September 30, 2018	2017
OPERATING ACTIVITIES:						
Premium receipts	**$ 6,262**	$ 6,888	**$ 303**	$ 277	**$ 6,565**	$ 7,165
Interest and dividends received	**3,030**	2,483	**93**	68	**3,123**	2,551
Cash received from plans upon trusteeship	**33**	20	**-**	-	**33**	20
Receipts from sponsors/non-sponsors	**579**	712	**-**	-	**579**	712
Receipts from the missing participant program	**24**	18	**-**	-	**24**	18
Other receipts	**2**	1	**-**	-	**2**	1
Benefit payments – trusteed plans	**(5,757)**	(5,686)	**-**	-	**(5,757)**	(5,686)
Financial assistance payments	**-**	-	**(153)**	(141)	**(153)**	(141)
Settlements and judgments	**(2)**	(5)	**-**	-	**(2)**	(5)
Payments for administrative and other expenses	**(473)**	(468)	**(29)**	(29)	**(502)**	(497)
Accrued interest paid on securities purchased	**(650)**	(393)	**(36)**	(16)	**(686)**	(409)
Net cash provided (used) by operating activities (Note 15)	**3,048**	3,570	**178**	159	**3,226**	3,729
INVESTING ACTIVITIES:						
Proceeds from sales of investments	**116,772**	103,440	**4,314**	2,878	**121,086**	106,318
Payments for purchases of investments	**(119,428)**	(106,248)	**(4,558)**	(2,990)	**(123,986)**	(109,238)
Net change in investment of securities lending collateral	**904**	1,196	**-**	-	**904**	1,196
Net change in securities lending payable	**(904)**	(1,196)	**-**	-	**(904)**	(1,196)
Net cash provided (used) by investing activities	**(2,656)**	(2,808)	**(244)**	(112)	**(2,900)**	(2,920)
Net increase (decrease) in cash and cash equivalents	**392**	762	**(66)**	47	**326**	809
Cash and cash equivalents, beginning of year	**5,185**	4,423	**149**	102	**5,334**	4,525
Cash and cash equivalents, end of year	**$ 5,577**	$ 5,185	**$ 83**	$ 149	**$ 5,660**	$ 5,334

The above cash flows are for trusteed plans and do not include non-trusted plans.

The accompanying notes are an integral part of these financial statements.

NOTES TO FINANCIAL STATEMENTS

September 30, 2018 and 2017

NOTE 1: ORGANIZATION AND PURPOSE

The Pension Benefit Guaranty Corporation (PBGC or the Corporation) is a federal corporation created by Title IV of the Employee Retirement Income Security Act of 1974 (ERISA) and is subject to the provisions of the Government Corporation Control Act. Its activities are defined by ERISA, as that act has been amended over the years. The Corporation insures the pension benefits, within statutory limits, of participants in covered single-employer and multiemployer defined benefit pension plans.

ERISA requires that PBGC programs be self-financing. ERISA provides that the U.S. Government is not liable for any obligation or liability incurred by PBGC.

For financial statement purposes, PBGC divides its business activity into two broad areas — "Underwriting Activity" and "Financial Activity" — covering both Single-Employer and Multiemployer Program segments. PBGC's underwriting activity provides financial guaranty insurance in return for insurance premiums (whether actually paid or not). Actual and expected probable losses that result from the termination of underfunded pension plans are included in this category, as are actuarial adjustments based on changes in actuarial assumptions, such as mortality. Financial Activity consists of the performance of PBGC's assets and liabilities. PBGC's assets consist of premiums collected from defined benefit plan sponsors, assets from distress or PBGC-initiated terminated plans that PBGC has insured, and recoveries from the former sponsors of those terminated plans. PBGC's future benefit liabilities consist of those future benefits, under statutory limits, that PBGC has assumed following distress or PBGC-initiated terminations (also referred to as an involuntary termination). Gains and losses on PBGC's investments and changes in the value of PBGC's future benefit liabilities (e.g., actuarial charges such as changes in interest factors and expected interest) are included in this area.

As of September 30, 2018, the Single-Employer and Multiemployer Programs reported net positions of $2,439 million and ($53,876) million, respectively. The Single-Employer Program had assets of $109,941 million offset by total liabilities of $107,502 million, which include a total present value of future benefits (PVFB) of $101,866 million. As of September 30, 2018, the Multiemployer Program had assets of $2,311 million offset by $56,153 million in present value of nonrecoverable future financial assistance. The Corporation has sufficient liquidity to meet its obligations for a number of years; however, barring changes, the Multiemployer Program will with certainty not be able to fully satisfy its long-term obligations to plan participants. The FY 2017 Projections Report shows that the risk of Multiemployer Program insolvency rises rapidly and is likely to occur by the end of FY 2025.

PBGC's $103,447 million of total investments (including cash and investment income receivable) represents the largest component of PBGC's Statements of Financial Position combined assets of $112,252 million at September 30, 2018. This amount of $103,447 million (as compared to investments under management of $101,608 million, as reported in section VII Investment Activities) reflects the fact that PBGC experiences a recurring inflow of trusteed plan assets that have not yet been incorporated into the PBGC investment program. For total investments (i.e., not the investment program), cash and fixed-income securities ($72,880 million) represent 70 percent of the total investments, while equity securities ($26,622 million) represent 26 percent of total investments. Private market assets, real estate, and other investments ($3,945 million), represent 4 percent of the total investments.

SINGLE-EMPLOYER AND MULTIEMPLOYER PROGRAM EXPOSURE

PBGC's estimate of the total underfunding in single-employer plans was $175,439 million for those sponsored by companies that have credit ratings below investment grade and that PBGC classified as reasonably possible of termination, as of September 30, 2018. This is a decrease of $62,749 million from the reasonably possible exposure of $238,188 million in FY 2017. This decrease is primarily due to the decline in the number of companies with lower than investment grade bond ratings and/or credit scores. These estimates are measured as of December 31 of the previous year (see Note 9). For FY 2018, this exposure is concentrated in the following sectors: manufacturing (primarily automobile/auto parts and fabricated metals), transportation (primarily airlines)/communications/utilities, and services.

PBGC estimates that as of September 30, 2018, it is reasonably possible that multiemployer plans may require future financial assistance in the amount of $9,410 million (see Note 9). This is a decrease of $4,562 million from the reasonably possible exposure of $13,972 million in FY 2017. The primary reasons for the decrease in liabilities were due to an increase in interest rates, as well as a strong economy, which resulted in an increase in plan contributions and favorable returns on plan investments improving cash flows.

There is significant volatility in plan underfunding and sponsor credit quality over time, which makes long-term estimation of PBGC's expected claims difficult. This volatility, along with the concentration of claims in a relatively small number of terminated plans, has characterized PBGC's experience to date and will likely continue. Among the factors that will influence PBGC's claims going forward are economic conditions affecting interest rates, financial markets, and the rate of business failures.

PBGC's sources of information on plan underfunding are the most recent Section 4010 and PBGC premium filings and other submissions to the Corporation. PBGC publishes Table S-49, "Various Measures of Underfunding in PBGC-Insured Plans," in its Pension Insurance Data Tables where the limitations of the estimates are fully and appropriately described.

Under the Single-Employer Program, PBGC is liable for the payment of guaranteed benefits with respect to underfunded terminated plans. An underfunded plan may terminate only if PBGC or a bankruptcy court finds that one of the four conditions for a distress termination, as defined in ERISA, is met or if PBGC initiates terminating a plan under one of five specified statutory tests. The net liability assumed by PBGC is generally equal to the present value of the future benefits payable by PBGC less amounts provided by the plan's assets and amounts recoverable by PBGC from the plan sponsor and members of the plan sponsor's controlled group, as defined by ERISA.

Under the Multiemployer Program, if a plan becomes insolvent, it receives financial assistance from PBGC to allow the plan to continue to pay participants their guaranteed benefits. PBGC recognizes assistance as a loss to the extent that the plan is not expected to be able to repay these amounts from future plan contributions, employer withdrawal liability or investment earnings. Since multiemployer plans do not receive PBGC assistance until fully insolvent, financial assistance is almost never repaid. For this reason, such assistance is fully reserved.

NOTE 2: SIGNIFICANT ACCOUNTING POLICIES

BASIS OF PRESENTATION

The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP). The preparation of the financial statements, in conformity with U.S. GAAP, requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period.

Estimates and assumptions may change over time as new information is obtained or subsequent developments occur. Actual results could differ from those estimates.

RECENT ACCOUNTING DEVELOPMENTS

In May 2015, the FASB issued Update No. 2015-07, *Fair Value Measurement (Topic 820), Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent)*, which removes investments from the fair value hierarchy for which the practical expedient is used to measure fair value at net asset value (NAV). Instead, an entity is required to include those investments as a reconciling line item so that the total fair value amount of investments in the disclosure is consistent with the amount on the balance sheet. The amendment is effective beginning October 1, 2017. Adoption of this amendment did not have a material effect on our financial statements.

VALUATION METHOD

A primary objective of PBGC's financial statements is to provide information that is useful in assessing PBGC's present and future ability to ensure that its plan beneficiaries receive benefits when due. Accordingly, PBGC values its financial assets at estimated fair value, consistent with the standards for pension plans contained in the FASB Accounting Standards Codification Section 960, *Defined Benefit Pension Plans*. PBGC values its liabilities for the present value of future benefits and present value of nonrecoverable future financial assistance using assumptions derived from market-based (fair value) annuity prices from insurance companies, as described in the Statement of Actuarial Opinion. As described in Section 960, the assumptions are "those assumptions that are inherent in the estimated cost at the (valuation) date to obtain a contract with an insurance company to provide participants with their accumulated plan benefit." Also, in accordance with Section 960, PBGC selects assumptions for expected retirement ages and the cost of administrative expenses in accordance with its best estimate of anticipated experience.

The FASB Accounting Standards Codification Section 820, *Fair Value Measurements and Disclosures*, defines fair value, establishes a framework for measuring fair value in U.S. GAAP, and expands disclosures about fair value measurements. Section 820 applies to accounting pronouncements that require or permit fair value measurements.

REVOLVING AND TRUST FUNDS

PBGC accounts for its Single-Employer and Multiemployer Programs' revolving and trust funds on an accrual basis. Each fund is charged its portion of the benefits paid each year. PBGC includes totals for the revolving and trust funds for presentation purposes in the financial statements; however, the Single-employer and Multiemployer Programs are separate programs by law and, therefore, PBGC also reports them separately.

ERISA provides for the establishment of the revolving fund where premiums are collected and held. The assets in the revolving fund are used to cover deficits incurred by plans trusteed and to provide funds for financial assistance. The Pension Protection Act of 1987 created a single-employer revolving fund (Fund 7) that is credited with all premiums in excess of $8.50 per participant, including all penalties and interest charged on these amounts, and its share of earnings from investments. This fund may not be used to pay PBGC's administrative costs or the benefits of any plan terminated prior to October 1, 1988, unless no other amounts are available.

The trust funds include assets (e.g., pension plan investments) PBGC assumes (or expects to assume) once a terminated plan has been trusteed, and related investment income. These assets generally are held by custodian banks. The trust funds support the operational functions of PBGC.

The trust funds reflect accounting activity associated with:

1) Trusteed plans (plans for which PBGC has legal responsibility). The assets and liabilities are reflected separately on PBGC's Statements of Financial Position, the income and expenses are included in the Statements of Operations and Changes in Net Position, and the cash flows from these plans are included in the Statements of Cash Flows.

2) Plans pending termination and trusteeship (plans for which PBGC has begun the process for termination and trusteeship by fiscal year-end). The assets and liabilities for these plans are reported as a net amount on the liability side of the Statements of Financial Position under "Present value of future benefits, net." For these plans, the income and expenses are included in the Statements of Operations and Changes in Net Position, but the cash flows are not included in the Statements of Cash Flows.

3) Probable terminations (plans that PBGC determines are likely to terminate and be trusteed by PBGC). The assets and liabilities for these plans are reported as a net amount on the liability side of the Statements of Financial Position under "Present value of future benefits, net." The accrued loss from these plans is included in the Statements of Operations and Changes in Net Position as part of "Losses (credits) from completed and probable terminations." The cash flows from these plans are not included in the Statements of Cash Flows. PBGC cannot exercise legal control over a plan's assets until it becomes the trustee.

ALLOCATION OF REVOLVING AND TRUST FUNDS

PBGC allocates assets, liabilities, income, and expenses to the Single-Employer and Multiemployer Programs' revolving and trust funds to the extent that such amounts are not directly attributable to a specific fund. Revolving fund investment income is allocated on the basis of each program's average cash and investments available during the year, while the expenses are allocated on the basis of each program's number of ongoing plans. Revolving fund assets and liabilities are allocated according to the year-end equity of each program's revolving funds. Plan assets acquired by PBGC and commingled at PBGC's custodian bank are credited directly to the appropriate fund, while the earnings and expenses on the commingled assets are allocated to each program's trust funds on the basis of each trust fund's value, relative to the total value of the commingled fund.

CASH AND CASH EQUIVALENTS

"Cash" includes cash on hand and demand deposits. "Cash equivalents" are investments with original maturities of one business day or highly liquid investments that are readily convertible into cash within one business day.

SECURITIES LENDING COLLATERAL

PBGC participates in a securities lending program administered by its custodian bank. The custodian bank requires collateral that equals 102 to 105 percent of the securities lent. The collateral is held by the custodian bank. The custodian bank either receives cash or non-cash as collateral or returns collateral to cover mark-to-market changes. Any cash collateral received is invested by PBGC's investment agent. In addition to the lending program managed by the custodian bank, some of PBGC's investment managers are authorized to invest in securities purchased under resale agreements (an agreement with a commitment by the seller to buy a security back from the purchaser at a specified price at a designated future date), and securities sold under repurchase agreements.

INVESTMENT VALUATION AND INCOME

PBGC bases market values on the last sale of a listed security, on the mean of the "bid-and-ask" for non-listed securities, or on a valuation model in the case of fixed income securities that are not actively traded. These valuations are determined as of the end of each fiscal year. Purchases and sales of securities are recorded on the trade date. In addition, PBGC invests in and discloses its derivative investments in accordance with the guidance contained in the FASB Accounting Standards Codification Section 815, *Derivatives and Hedging*. Investment income is accrued as earned. Dividend income is recorded on the ex-dividend date. Realized gains and losses on sales of investments are calculated using first-in, first-out for the revolving fund and weighted average cost for the trust fund. PBGC marks the plan's assets to market, and any increase or decrease in the market value of a plan's assets occurring after the date on which the plan is terminated must, by law, be credited to or suffered by PBGC.

SECURITIES PURCHASED UNDER REPURCHASE AGREEMENTS

PBGC's investment managers purchase securities under repurchase agreements, whereby the seller will buy the security back at a pre-agreed price and date. Those that mature in more than one day are reported under "Fixed maturity securities" as "Securities purchased under repurchase agreements" in the Note 3 table entitled "Investments of Single-Employer Revolving Funds and Single-Employer Trusteed Plans." Repurchase agreements that mature in one day are included in "Cash and cash equivalents," which are reported on the Statements of Financial Position. Refer to Note 3 for further information regarding repurchase agreements.

SPONSORS OF TERMINATED PLANS

The amounts due from sponsors of terminated plans or members of their controlled group represent the settled, but uncollected, claims for employer liability (underfunding as of date of plan termination) and for contributions due their plan less an allowance for estimated uncollectible amounts. PBGC discounts any amounts expected to be received beyond one year for time and risk factors. Some agreements between PBGC and plan sponsors provide for contingent payments based on future profits of the sponsors. The Corporation will report any such future amounts in the period they are realizable. Income and expenses related to amounts due from sponsors are reported in the underwriting section of the Statements of Operations and Changes in Net Position. Interest earned on settled claims for employer liability and due and unpaid employer contributions (DUEC) is reported as "Income: Other." The change in the allowances for uncollectible employer liability and DUEC is reported as "Expenses: Other."

PREMIUMS

Premiums receivable represent the plan reported premiums owed, and the PBGC estimated amounts on filings not yet due and submitted and past due premiums deemed collectible, including penalties and interest. The liability for unearned premiums represents annual premium fees that have been received in advance of the period in which they will be earned by PBGC. They remain as liabilities until such time as they are ratably earned over the period of time to which the premium applies. "Premium income, net" represents actual and estimated revenue generated from defined benefit pension plan premium filings as required by Title IV of ERISA less bad debt expense for premiums, interest and penalties. For insolvent multiemployer plans, bad debt expense also includes a reserve for premium payments waived by PBGC and treated as financial assistance in accordance with ERISA Section 4007 (see Note 11).

CAPITALIZED ASSETS

Capitalized assets include furniture and fixtures, electronic processing equipment and internal-use software. This includes costs for internally developed software incurred during the application development stage (system design including software configuration and software interface, coding, and testing). These costs are shown net of accumulated depreciation and amortization.

PRESENT VALUE OF FUTURE BENEFITS (PVFB)

The PVFB is the estimated liability for future pension benefits that PBGC is or will be obligated to pay the participants of trusteed plans and the net liability for plans pending termination and trusteeship. The PVFB liability (including trusteed plans and plans pending termination and trusteeship) is stated as the actuarial present value of estimated future benefits less the present value of estimated recoveries from sponsors and members of their controlled group and the assets of plans pending termination and trusteeship as of the date of the financial statements. PBGC also includes the estimated liabilities attributable to plans classified as probable terminations as a separate line item in the PVFB (net of estimated recoveries and plan assets). PBGC uses assumptions to adjust the value of those future payments to reflect the time value of money (by discounting) and the probability of payment (by means of decrements, such as for death or retirement). PBGC also includes anticipated expenses to settle the benefit obligation in the determination of the PVFB. PBGC's benefit payments to participants reduce the PVFB liability.

The values of the PVFB are particularly sensitive to changes in underlying estimates and assumptions. These estimates and assumptions could change and the impact of these changes may be material to PBGC's financial statements (see Note 6).

(1) Trusteed Plans: Represents the present value of future benefit payments less the present value of expected recoveries (for which a settlement agreement has not been reached with sponsors and members of their controlled group) for plans that have terminated and been trusteed by PBGC prior to fiscal year-end. Assets are shown separately from liabilities for trusteed plans. PBGC's liability under the expanded Missing Participants Program is included in this category. Under this program that began in FY 2018, most terminated defined contribution plans, small professional service pension plans, and multiemployer plans can now transfer the benefits of missing participants to PBGC. Previously, the program covered only insured defined benefit plans terminating in a standard termination.

(2) Pending Termination and Trusteeship: Represents the present value of future benefit payments less the plans' net assets (at fair value) anticipated to be received and the present value of expected recoveries (for which a settlement agreement has not been reached with sponsors and members of their controlled group) for plans for which termination action has been initiated and/or completed prior to fiscal year-end. Unlike trusteed plans, the liability for plans pending termination and trusteeship is shown net of plan assets.

(3) Settlements and Judgments: Represents estimated liabilities related to settled litigation (see Note 6).

(4) Net Claims for Probable Terminations: In accordance with the FASB Accounting Standards Codification Section 450, *Contingencies*, PBGC recognizes net claims for probable terminations which represent PBGC's best estimate of the losses, net of plan assets, and the present value of expected recoveries (from sponsors and members of their controlled group) for plans that are likely to terminate in the future. Under a specific identification process, PBGC evaluates each controlled group having $50 million or more of underfunding and recognizes a contingent loss for the estimated net claim of those plans meeting the probable termination criteria. These estimated losses are based on conditions that existed as of PBGC's fiscal year-end. Management believes it is likely that one or more events subsequent to PBGC's fiscal year-end will occur, confirming the loss.

Criteria used for classifying a specific single-employer plan as a probable termination include, but are not limited to, one or more of the following conditions: the plan sponsor is in liquidation or comparable state insolvency proceeding with no known solvent controlled group member; the sponsor has filed or intends to file for distress plan termination and the criteria will likely be met; or PBGC is considering to initiate a plan termination. In addition, management takes into account other economic events and factors in making judgments regarding the classification of a plan as a probable termination. These events and factors may include, but are not limited to, the following: the plan sponsor is in bankruptcy or has indicated that a bankruptcy filing is imminent; the plan sponsor has stated that plan termination is likely; the plan sponsor has received a going concern opinion from its independent auditors; or the plan sponsor is in default under existing credit agreement(s).

In addition, a reserve for small unidentified probable losses is recorded for the estimated future contingent losses stemming from insured single-employer plans with an aggregate underfunding of less than $50 million. The reserve is based on the historical three-year rolling average of losses related to actual plan terminations (with an aggregate underfunding of less than $50 million) and indexed to the S&P 500 to reflect changes in economic conditions. (See Note 6 for further information on Net Claims for Probable Terminations.)

(5) PBGC identifies certain plans as high-risk if the plan sponsor is in Chapter 11 proceedings or the sponsor's senior unsecured debt is rated CCC+/Caa1 or lower by S&P or Moody's, respectively. PBGC specifically reviews each plan identified as high-risk and classifies those plans as probable if, based on available evidence, PBGC concludes that plan termination is likely (based on criteria described in (4) above). Otherwise, high-risk plans are classified as reasonably possible.

(6) In accordance with the FASB Accounting Standards Codification Section 450, *Contingencies*, PBGC's exposure to losses from plans of companies that are classified as reasonably possible is disclosed in the footnotes. In order for a plan sponsor to be specifically classified as reasonably possible, it must first have $50 million or more of underfunding, as well as meet additional criteria. Criteria used for classifying a company as reasonably possible include, but are not limited to, one or more of the following conditions: the plan sponsor is in Chapter 11 reorganization; a funding waiver is pending or outstanding with the Internal Revenue Service; the sponsor missed a minimum funding contribution; the sponsor's bond rating is below investment-grade for Standard & Poor's (BB+) or Moody's (Ba1); or the sponsor has no bond rating but the Dun & Bradstreet Financial Stress Score is below the threshold considered to be investment grade (see Note 9).

PRESENT VALUE OF NONRECOVERABLE FUTURE FINANCIAL ASSISTANCE

In accordance with Title IV of ERISA, PBGC provides financial assistance to multiemployer plans, in the form of loans, to enable the plans to pay guaranteed benefits to participants and reasonable administrative expenses. These loans, issued in exchange for interest-bearing promissory notes, constitute an obligation of each plan.

The present value of nonrecoverable future financial assistance represents the estimated nonrecoverable payments to be provided by PBGC in the future to multiemployer plans that will not be able to meet their benefit obligations. The present value of nonrecoverable future financial assistance is based on the difference between the present value of future guaranteed benefits and expenses and the market value of plan assets, including the present value of future amounts expected to be paid by employers, for those plans that are expected to require future assistance. The amount reflects the rates at which, in the opinion of PBGC, these liabilities (net of expenses) could be settled in the market for single-premium nonparticipating group annuities issued by private insurers (see Note 7).

A liability for a particular plan is included in the "Present Value of Nonrecoverable Future Financial Assistance" when it is determined that the plan is currently, or will likely become in the future, insolvent and will require assistance to pay the participants their guaranteed benefit. In accordance with the FASB Accounting Standards Codification Section 450, *Contingencies*, PBGC recognizes net claims for probable insolvencies for plans that are likely to become insolvent and may require future financial assistance. Projecting a future insolvency requires considering several complex factors, such as an estimate of future cash flows, future mortality rates, and age of participants not in pay status.

Each year, PBGC analyzes insured multiemployer plans to identify those plans that are at risk of becoming claims on the insurance program. Regulatory filings with PBGC and the other ERISA agencies are important to this analysis and determination of risk. In general, if a terminated plan's assets are less than the present value of its liabilities, PBGC considers the plan a probable risk of requiring financial assistance in the future.

PBGC also analyzes ongoing multiemployer plans (i.e., plans that continue to have employers making regular contributions for covered work) to determine whether any such plans may be probable or possible claims on the insurance program. In conducting this analysis each year, PBGC examines plans that are chronically underfunded, have poor cash flow trends, have a falling contribution base, and may lack a sufficient asset cushion to weather income losses. A combination of these factors, or any one factor that is of sufficient concern, leads to a more detailed analysis of the plan's funding and the likelihood that the contributing employers will be willing and able to maintain the plan.

PBGC uses specific criteria for classifying as insolvent (PBGC's insurable event for multiemployer plans), probable, and reasonably possible multiemployer plans. The criteria are as follows:

- Any multiemployer plans currently receiving financial assistance are classified as insolvent.
- Terminated, underfunded multiemployer plans (i.e., "wasting trusts") are classified as probable.
- Ongoing multiemployer plans projected to become insolvent:
  - Within 10 years are classified as probable.
  - From 10 to 20 years are classified as reasonably possible.

In addition, for small plans (fewer than 2,500 participants), the estimated probable and reasonably possible losses are accrued for the estimated future contingent losses stemming from the Multiemployer Program. This small plan bulk reserve uses an aggregate method to estimate liability and exposure, rather than reviewing each plan individually, based on the use of seven years of the present value of nonrecoverable future financial assistance for plan termination history to project the current probable liability. The small plan probables are calculated using a seven-year ratio of new plan terminations or insolvencies to the total unfunded liability in a given year. This ratio is applied to the current unfunded liability for small plans to calculate the probable liability.

In general, the date of insolvency is estimated by projecting plan cash flows using PBGC's actuarial assumptions for terminated plans, but also considered are projections based on other assumptions, such as those used by the plan actuary.

MPRA provides that certain plans may apply to the Department of the Treasury to suspend benefits, and provides for a participant vote on the benefit suspension. These plans also may apply to PBGC for financial assistance, either for a facilitated merger or for a partition. Application for partition generally will occur in conjunction with an application to Treasury for benefit suspension. These actions are not considered in the determination of whether nonrecoverable future financial assistance is probable until the approval has been granted.

The present value of nonrecoverable future financial assistance is presented in the Liability section of the Statements of Financial Position (see Note 7).

ADMINISTRATIVE EXPENSES

These operating expenses (for either the single-employer or multiemployer insurance programs) are amounts paid and accrued for services rendered or while carrying out other activities that constitute PBGC's ongoing operations (e.g., payroll, contractual services, office space, materials and supplies). An expense allocation methodology is used to fully capture the administrative expenses attributable to either the single-employer or multiemployer insurance programs. All indirect administrative expenses associated with the Single-Employer and Multiemployer Programs are being allocated using the number of ongoing plans in each program.

OTHER EXPENSES

These expenses represent an estimate of the net amount of receivables deemed uncollectible during the period. The estimate is based on the most recent status of the debtor (e.g., sponsor), the age of the receivables and other factors that indicate the element of uncollectibility in the receivables outstanding.

LOSSES FROM COMPLETED AND PROBABLE TERMINATIONS

Amounts reported as losses from completed and probable terminations represent the difference as of the actual or expected date of plan termination (DOPT) between the present value of future benefits (including amounts owed under Section 4022(c) of ERISA) assumed, or expected to be assumed, by PBGC, less related plan assets, and the present value of expected recoveries from sponsors and members of their controlled group (see Note 12). When a plan terminates, the previously recorded probable net claim is reversed and newly estimated DOPT plan assets, recoveries and PVFB are netted and reported on the line "PVFB - Plans pending termination and trusteeship" (this value is usually different from the amount previously reported), with any change in the estimate being recorded in the Statements of Operations and Changes in Net Position. In addition, the plan's net income from DOPT to the beginning of PBGC's fiscal year is included as a component of losses from completed and probable terminations for plans with termination dates prior to the year in which they were added to PBGC's inventory of terminated plans.

ACTUARIAL ADJUSTMENTS AND CHARGES (CREDITS)

PBGC classifies actuarial adjustments related to insurance-based changes in method and the effect of experience as underwriting activity; actuarial adjustments are the result of the movement of plans from one valuation methodology to another (e.g., nonseriatim (calculating the liability for the group) to seriatim (calculating a separate liability for each person)), and of new updated data (e.g., deaths, revised participant data). Actuarial charges (credits) are related to changes in interest factors, and expected interest is classified as financial activity. These adjustments and charges (credits) represent the change in the PVFB that results from applying actuarial assumptions in the calculation of future benefit liabilities (see Note 6).

DEPRECIATION AND AMORTIZATION

PBGC calculates depreciation on the straight-line basis over estimated useful lives of five years for equipment and 10 years for furniture and fixtures. PBGC calculates amortization for capitalized software, which includes certain costs incurred for purchasing and developing software for internal use, on the straight-line basis over estimated useful lives not to exceed five years, commencing on the date that the Corporation determines that the internal-use software is implemented. Routine maintenance and leasehold improvements (the amounts of which are not material) are charged to operations as incurred. Capitalization of software cost occurs during the development stage, and costs incurred during the preliminary project and post-implementation stages are expensed as incurred.

NOTE 3: INVESTMENTS

Premium receipts are invested through the revolving fund in U.S. Treasury securities. The trust funds include assets that PBGC assumes or expects to assume with respect to terminated plans (e.g., recoveries from sponsors) and investment income thereon. These assets generally are held by custodian banks. The basis and market value of the investments by type are detailed below, as well as related investment profile data. The basis indicated is the cost of the asset if assumed after the date of plan termination or the market value at date of plan termination if the asset was assumed as a result of a plan's termination. PBGC marks the plan's assets to market, and any increase or decrease in the market value of a plan's assets occurring after the date on which the plan is terminated must, by law, be credited to or suffered by PBGC. Investment securities denominated in foreign currency are translated into U.S. dollars at the prevailing exchange rates at period ending September 30, 2018. Purchases and sales of investment securities, income, and expenses are translated into U.S. dollars at the prevailing exchange rates on the respective dates of the transactions. The portfolio does not isolate that portion of the results of operations resulting from changes in foreign exchange rates of investments from the fluctuations arising from changes in market prices of securities held. Such fluctuations are included with the net realized and unrealized gain or loss on investments. For PBGC's securities, unrealized holding gains and losses are both recognized by including them in earnings. Unrealized holding gains and losses measure the total change in fair value — consisting of unpaid interest income earned or unpaid accrued dividend and the remaining change in fair value from holding the security.

To Be Announced (TBA) and Bond Forward transactions are recorded as regular buys and sells of investments and not as derivatives. TBA is a contract for the purchase or sale of mortgage-backed securities to be delivered on a future date. The term TBA is derived from the fact that the actual mortgage-backed security that will be delivered to fulfill a TBA trade is not designated at the time the trade is made. The securities are to be announced 48 hours prior to the established trade settlement date. TBAs are issued by the Federal Home Loan Mortgage Corporation (FHLMC), the Federal National Mortgage Association (FNMA), and Government National Mortgage Association (GNMA). In accordance with FASB Accounting Standards Codification Section 815, *Derivatives and Hedging*, TBA and Bond Forward contracts are deemed regular way trades as they are completed within the time frame generally established by regulations and conventions in the marketplace or by the exchange on which they are executed. Thus, recording of TBA and Bond Forward contracts recognizes the acquisition or disposition of the securities at the full contract amounts on day one of the trade.

Bond Forwards and TBAs are reported to "Receivables, net – Sale of securities" and "Due for purchases of securities" from derivative contracts receivables and payables. As of September 30, 2018, TBA receivables were $314 million and no Bond Forward receivables were reported. In addition, as of September 30, 2018, TBA payables were $556 million and no Bond Forward payables were reported.

INVESTMENTS OF SINGLE-EMPLOYER REVOLVING FUNDS AND SINGLE-EMPLOYER TRUSTEED PLANS

(Dollars in millions)	September 30, 2018 Basis	September 30, 2018 Market Value	September 30, 2017 Basis	September 30, 2017 Market Value
Fixed maturity securities:				
U.S. Government securities	**$38,273**	**$37,550**	$29,867	$29,944
Commercial paper/securities purchased under repurchase agreements	**250**	**250**	200	200
Asset backed securities	**3,188**	**3,123**	3,312	3,329
Pooled funds				
Domestic	**915**	**688**	2,642	2,591
International	**-**	**-**	-	-
Global/other	**-**	**-**	2	2
Corporate bonds and other	**14,254**	**14,043**	14,549	15,192
International securities	**9,245**	**8,873**	9,049	9,408
Subtotal	**66,125**	**64,527**	59,621	60,666
Equity securities:				
Domestic	**378**	**405**	225	253
International	**1,765**	**1,953**	1,704	1,884
Pooled funds				
Domestic	**8,673**	**13,335**	9,824	12,880
International	**6,425**	**10,920**	7,010	11,728
Global/other	**0** *	**0** *	3	3
Subtotal	**17,241**	**26,613**	18,766	26,748
Private equity	**1,204**	**510**	1,252	606
Real estate and real estate investment trusts	**3,033**	**3,428**	2,804	3,114
Insurance contracts and other investments	**6**	**7**	15	16
Total[1]	**$87,609**	**$95,085** [2]	$82,458	$91,150

* Less than $500,000

[1] Total includes securities on loan at September 30, 2018, and September 30, 2017, with a market value of $4,439 million and $3,686 million, respectively.

[2] This total of $95,085 million of investments at market value represents the single-employer assets only.

INVESTMENTS OF MULTIEMPLOYER REVOLVING FUNDS AND MULTIEMPLOYER TRUSTEED PLANS

(Dollars in millions)	September 30, 2018 Basis	September 30, 2018 Market Value	September 30, 2017 Basis	September 30, 2017 Market Value
Investment securities:				
Fixed U.S. Government securities	**$2,073**	**$2,035**	$1,919	$1,921
Equity securities	**-**	**-**	-	-
Total	**$2,073**	**$2,035**	$1,919	$1,921

INVESTMENT PROFILE

	September 30,	
	2018	2017
Fixed Income Assets		
Average Quality	**A**	**A**
Average Maturity (years)	**19.4**	**14.6**
Duration (years)	**15.1**	**10.3**
Yield to Maturity (%)	**4.0**	**3.2**
Equity Assets		
Average Price/Earnings Ratio	**19.3**	**21.8**
Dividend Yield (%)	**2.4**	**2.3**
Beta	**1.0**	**1.0**

DERIVATIVE INSTRUMENTS

PBGC assigns investment discretion and grants specific authority to all of its investment managers to invest according to specific portfolio investment guidelines the Corporation has established. PBGC further limits the use of derivatives by investment managers through tailored provisions in the investment guidelines with investment managers consistent with PBGC's investment policy statement and overall risk tolerance. These investment managers, who act as fiduciaries to PBGC, determine when it may or may not be appropriate to utilize derivatives in the portfolio(s) for which they are responsible. Investments in derivatives carry many of the same risks of the underlying instruments and carry additional risks that are not associated with direct investments in the securities underlying the derivatives.

Risks may arise from the potential inability to terminate or sell derivative positions, although derivative instruments are generally more liquid than physical market instruments. A liquid secondary market may not always exist for certain derivative positions. Over-the-counter derivative instruments also involve counterparty risk that the other party to the derivative instrument will not meet its obligations.

The use of derivatives in the PBGC investment portfolio is also further restricted insofar as they may not be used to create leverage in the portfolio. Thus, derivatives are not permitted to be utilized to leverage the portfolio beyond the maximum risk level associated with a fully invested portfolio of physical securities.

Derivative instruments are used to mitigate risk (e.g., adjust duration or currency exposures), enhance investment returns, and/or as liquid and cost-efficient substitutes for positions in physical securities. These derivative instruments are not designated as accounting hedges consistent with FASB Accounting Standards Codification Section 815, *Derivatives and Hedging*, which requires an active designation as a prerequisite for any hedge accounting. PBGC uses a no-hedging designation, which results in the gain or loss on a derivative instrument to be recognized currently in earnings. Derivatives are accounted for at fair value in accordance with the FASB Accounting Standards Codification Section 815, *Derivatives and Hedging*. Derivatives are marked to market with changes in value reported as a component of financial income on the Statements of Operations and Changes in Net Position. PBGC presents all derivatives at fair value on the Statements of Financial Position.

During fiscal years 2018 and 2017, PBGC, through its investment managers, invested in investment products that used various U.S. and non-U.S. derivative instruments. Those products included, but are not limited to: index futures, options, money market futures, government bond futures, interest rate, credit default and total return swaps and swaption (an option on a swap) contracts, stock warrants and rights, debt option contracts, and foreign currency futures, forward and option contracts. Some of these derivatives are traded on organized exchanges and thus bear minimal counterparty risk. The counterparties to PBGC's non-exchange-traded derivative contracts are major financial institutions subject to ISDA (International Swaps and Derivatives Association, Inc.) master agreements or IFEMAs (International Foreign Exchange Master Agreements) and minimum credit ratings required by investment guidelines. PBGC monitors PBGC's counterparty risk and exchanges collateral under most contracts to further support performance by counterparties. Some of PBGC's non-exchange traded derivative contracts are centrally cleared through a Commodity Futures Trading Commission (CFTC)-recognized clearinghouse and the required margin (collateral) is maintained by the clearinghouse to support the performance by counterparties, which are members of the clearinghouse. A clearinghouse reduces the settlement risks by netting offsetting transactions between multiple counterparties by requiring higher levels of collateral deposits or margin requirements compared to bilateral arrangements. Settlement risks are also reduced by the clearinghouse providing independent valuation of trades and margin, monitoring the credit worthiness of the clearing firms, and providing a guarantee fund, which could be used to cover losses that exceed a defaulting clearing firm's margin on deposit.

A futures contract is an agreement between a buyer or seller and an established futures exchange clearinghouse in which the buyer or seller agrees to take or make a delivery of a specific amount of a financial instrument at a specified price on a specific date (settlement date) in the future. The futures exchanges and clearinghouses clear, settle, and guarantee transactions occurring through their facilities. Upon entering into a futures contract, an "initial margin" amount (in cash or liquid securities) of generally 1 to 6 percent of the face value indicated in the futures contract is required to be deposited with the broker. Open futures positions are marked to market daily. Subsequent payments known as "variation margin" are made or received by the portfolio dependent upon the daily fluctuations in value of the underlying contract. PBGC maintains adequate liquidity in its portfolio to meet these margin calls.

PBGC also invests in forward contracts. A forward foreign currency contract is a commitment to purchase or sell a foreign currency at the settlement date (in the future) at a negotiated rate. Foreign currency forward, futures, and option contracts may be used as a substitute for cash currency holdings. This is in order to minimize currency risk exposure to changes in foreign currency exchange rates and to adjust overall currency exposure to reflect the investment views of the fixed income and equity portfolio managers regarding relationships between currencies.

A swap is an agreement between two parties to exchange different financial returns on a notional investment amount. The major forms of swaps traded are interest rate swaps, credit default swaps, and total return swaps. These swaps are netted for reporting purposes. PBGC uses swap and swaption contracts to adjust exposure to interest rates, fixed income securities exposure, credit exposure, and equity exposure, and to generate income based on the investment views of the portfolio managers regarding interest rates, indices, and individual securities.

Interest rate swaps involve exchanges of fixed-rate and floating-rate interest. Interest rate swaps are often used to alter exposure to interest rate fluctuations by swapping fixed-rate obligations for floating-rate obligations, or vice versa. The counterparties to the swap agree to exchange interest payments on specific dates, according to a predetermined formula. The payment flows are usually netted against each other, with one party paying the difference to the other.

A credit default swap is a contract between a buyer and seller of protection against pre-defined credit events. PBGC may buy or sell credit default swap contracts to seek to increase the portfolio's income or to mitigate the risk of default on portfolio securities.

A total return swap is a contract between a buyer and seller of exposures to certain asset classes, such as equities. PBGC may buy or sell total return contracts to seek to increase or reduce the portfolio's exposure to certain asset classes.

An option contract is a contract in which the writer of the option grants the buyer of the option the right to purchase from (call option) or sell to (put option) the writer a designated instrument at a specified price within a specified period of time.

Stock warrants and rights allow PBGC to purchase securities at a stipulated price within a specified time limit.

For the fiscal years ended September 30, 2018 and 2017, gains and losses from settled margin calls are reported in "Investment income" on the Statements of Operations and Changes in Net Position. Securities and cash are pledged as collateral for derivative contracts (e.g., futures and swaps) and are recorded as a receivable or payable.

FASB Accounting Standards Codification Section 815, *Derivatives and Hedging*, requires the disclosure of fair values of derivative instruments and their gains and losses in its financial statements of both the derivative positions existing at period ending September 30, 2018 and the effect of using derivatives during the reporting period.

The following three key tables present PBGC's use of derivative instruments and its impact on PBGC's financial statements:

- <u>Fair Values of Derivative Instruments</u> – Identifies the location of derivative fair values on the Statements of Financial Position, as well as the notional amounts.
- <u>Offsetting of Derivative Assets</u> – Presents the impact of legally enforceable master netting agreements on derivative assets.
- <u>Offsetting of Derivative Liabilities</u> – Presents the impact of legally enforceable master netting agreements on derivative liabilities.

FAIR VALUES OF DERIVATIVE INSTRUMENTS

	Asset Derivative					
	September 30, 2018			September 30, 2017		
(Dollars in millions)	Statements of Financial Position Location	**Notional**	**FMV**	Statements of Financial Position Location	Notional	FMV
Futures	Derivative Contracts	**$17,557**	**$2**	Derivative Contracts	$3,842	$4
Swap contracts						
Interest rate swaps	Investments-Fixed	**1,626**	**20**	Investments-Fixed	2,047	8
Other derivative swaps	Investments-Fixed	**543**	**10**	Investments-Fixed	985	13
Option contracts	Investments-Fixed	**122**	**1**	Investments-Fixed	3,202	1
Forwards - foreign exchange	Investments-Fixed	**5,111**	**(10)**	Investments-Fixed	4,812	(10)
	Investments-Equity	**-**	**-**	Investments-Equity	-	-

	Liability Derivative					
	September 30, 2018			September 30, 2017		
(Dollars in millions)	Statements of Financial Position Location	**Notional**	**FMV**	Statements of Financial Position Location	Notional	FMV
Futures	Derivative Contracts	**$2,496**	**($329)**	Derivative Contracts	$2,262	($25)
Option contracts	Derivative Contracts	**355**	**(1)**	Derivative Contracts	166	(2)

Additional information specific to derivative instruments is disclosed in Note 4 – Derivative Contracts, and Note 5 – Fair Value Measurements.

PBGC uses a net presentation on the Statements of Financial Position for those derivative financial instruments entered into with counterparties under legally enforceable master netting agreements. Derivative receivables and derivative payables are netted on the Statements of Financial Position with the same counterparty and the related cash collateral receivables and payables when a legally enforceable master netting agreement exists (i.e., for over-the-counter derivatives). Master netting agreements are used to mitigate counterparty credit risk in certain transactions, including derivatives transactions, repurchase agreements and reverse repurchase agreements. The master netting agreement also may require the exchange of cash or marketable securities to collateralize either party's net position. Any cash collateral exchanged with counterparties under these master netting agreements is also netted against the applicable derivative fair values on the Statements of Financial Position.

OFFSETTING OF DERIVATIVE ASSETS FAIR VALUE

(Dollars in millions)	September 30, 2018 Gross Amount of Recognized Assets	September 30, 2018 Gross Amounts Offset in Statements of Financial Position	September 30, 2018 Net Amounts of Assets Presented in Statements of Financial Position	September 30, 2017 Gross Amount of Recognized Assets	September 30, 2017 Gross Amounts Offset in Statements of Financial Position	September 30, 2017 Net Amounts of Assets Presented in Statements of Financial Position
Derivatives						
Interest-rate contracts	**$ 0***	**$ 0***	**$ 0***	$ 2	$ 0*	$ 2
Foreign exchange contracts	**29**	**(19)**	**10**	30	(20)	10
Other derivative contracts[1]	**2**	**(1)**	**1**	7	0*	7
Cash collateral nettings	**-**	**-**	**-**	-	-	-
Total Derivatives	**$31**	**($20)**	**$11**	$39	($20)	$19
Other financial instruments[2]						
Repurchase agreements	**404**	**-**	**404**	242	-	242
Securities lending collateral	**4,010**	**-**	**4,010**	3,106	-	3,106
Total derivatives and other financial instruments	**$4,445**	**($20)**	**$4,425**	$3,387	($20)	$3,367

(Dollars in millions)	September 30, 2018 Gross Amounts Not Offset in Statements of Financial Position			September 30, 2017 Gross Amounts Not Offset in Statements of Financial Position		
	Net Amount of Assets Presented in Statements of Financial Position	**Collateral Received**	**Net Amount**	Net Amount of Assets Presented in Statements of Financial Position	Collateral Received	Net Amount
Repurchase agreements	**$ 404**	**$ -**	**$404**	$ 242	$ -	$242
Security lending collateral	**4,010**	**(4,010)**	**-**	3,106	(3,106)	-
Total	**$4,414**	**($4,010)**	**$404**	$3,348	($3,106)	$242

* Less than $500,000

1 Other derivative contracts include total return swaps, currency swaps, and credit default swaps.

2 Under subheading "Other financial instruments", repurchase agreements and securities lending collateral are presented on a gross basis within the table and on the Statements of Financial Position.

OFFSETTING OF DERIVATIVE LIABILITIES FAIR VALUE

	September 30, 2018			September 30, 2017		
(Dollars in millions)	**Gross Amount of Recognized Liabilities**	**Gross Amounts Offset in Statements of Financial Position**	**Net Amounts of Assets Presented in Statements of Financial Position**	Gross Amount of Recognized Liabilities	Gross Amounts Offset in Statements of Financial Position	Net Amounts of Assets Presented in Statements of Financial Position
Derivatives						
Interest-rate contracts	**$ 1**	**$ 0***	**$ 1**	$ 0*	$ 0*	$ 0*
Foreign exchange contracts	**39**	**(19)**	**20**	41	(20)	21
Other derivative contracts[1]	**2**	**(1)**	**1**	3	0*	3
Cash collateral nettings	**-**	**0***	**0***	-	12	12
Total Derivatives	**$42**	**($20)**	**$22**	$44	($8)	$36
Other financial instruments[2]						
Resale agreements	**$ -**	**$ -**	**$ -**	$ -	$ -	$ -
Securities lending collateral	**4,010**	**-**	**4,010**	3,106	-	3,106
Total derivatives and other financial instruments	**$4,052**	**($20)**	**$4,032**	$3,150	($8)	$3,142

	September 30, 2018			September 30, 2017		
(Dollars in millions)	**Gross Amounts Not Offset in Statements of Financial Position**			Gross Amounts Not Offset in Statements of Financial Position		
	Net Amount of Liabilities Presented in Statements of Financial Position	**Collateral Received**	**Net Amount**	Net Amount of Liabilities Presented in Statements of Financial Position	Collateral Received	Net Amount
Resale agreements	**$ -**	**$ -**	**$ -**	$ -	$ -	$ -
Security lending collateral	**4,010**	**(4,010)**	**-**	3,106	(3,106)	-
Total	**$4,010**	**($4,010)**	**$ -**	$3,106	($3,106)	$ -

* Less than $500,000

[1] Other derivative contracts include total return swaps, currency swaps, and credit default swaps.

[2] Under subheading "Other financial instruments", repurchase agreements and securities lending collateral are presented on a gross basis within the table and on the Statements of Financial Position.

The following table identifies the location of derivative gains and losses on the Statements of Operations and Changes in Net Position as of September 30, 2018, and September 30, 2017.

EFFECT OF DERIVATIVE CONTRACTS ON THE STATEMENTS OF OPERATIONS AND CHANGES IN NET POSITION

(Dollars in millions)	Location of Gain or (Loss) Recognized in Income on Derivatives	Amount of Gain or (Loss) Recognized in Income on Derivatives: **Sept. 30, 2018**	Amount of Gain or (Loss) Recognized in Income on Derivatives: Sept. 30, 2017
Futures			
Contracts in a receivable position	Investment Income-Fixed	**$55**	$32
Contracts in a receivable position	Investment Income-Equity	**-**	-
Contracts in a payable position	Investment Income-Fixed	**(306)**	(87)
Contracts in a payable position	Investment Income-Equity	**-**	-
Swap agreements			
Interest rate swaps	Investment Income-Fixed	**46**	37
Other derivative swaps	Investment Income-Fixed	**(9)**	29
Option contracts			
Options purchased (long)	Investment Income-Fixed	**2**	4
Options purchased (long)	Investment Income-Equity	**0 ***	-
Options written (sold short)	Investment Income-Fixed	**0 ***	1
Options written (sold short)	Investment Income-Equity	**-**	0 *
Forward contracts			
Forwards - foreign exchange	Investment Income-Fixed	**(29)**	255
	Investment Income-Equity	**0 ***	0 *

* Less than $500,000

Additional information specific to derivative instruments is disclosed in Note 4 - Derivative Contracts, and Note 5 - Fair Value Measurements.

SECURITIES LENDING

PBGC participates in a securities lending program administered by its custodian bank. The custodian bank requires initial collateral that equals 102 to 105 percent of the securities lent. The collateral is held by the custodian bank or its agent. The custodian bank either receives cash or non-cash as collateral or returns collateral to cover mark-to-market changes. Any cash collateral received is invested by PBGC's investment agent. In addition to the lending program managed by the custodian bank, some of PBGC's investment managers are authorized to invest in securities purchased under resale agreements (an agreement with a commitment by the seller to buy a security back from the purchaser at a specified price at a designated future date).

The average value of securities on loan through September 30, 2018, and through September 30, 2017, was $4,026 million and $3,576 million, respectively. The average value of lendable securities was $29,317 million through September 30, 2018, and $26,754 million through September 30, 2017. The ratio of the average value of securities on loan and the average value of lendable securities is the average utilization rate. This average utilization rate was 14% through September 30, 2018 and 13% through September 30, 2017. The average utilization rate increase is due to an increase in utilization of U.S. Corporate Bonds and Equities, offset by a decrease in utilization of U.S. Government Securities as discussed below.

The average value of U.S. Corporate Bonds and Equity securities on loan through September 30, 2018, was $2,856 million, as compared to $2,036 million through September 30, 2017. The average value of U.S. Corporate Bonds and Equity securities on loan is 71% of the $4,026 million average value of securities on loan through September 30, 2018, as compared to 57% of the $3,576 million average value of securities on loan through September 30, 2017. The average value of lendable U.S. Corporate Bonds and Equity securities was $19,412 million through September 30, 2018, or 66 percent of PBGC's overall average value of lendable securities; while the average value of lendable U.S. Corporate Bonds and Equity securities was $17,485 million through September 30, 2017, or 65 percent of PBGC's overall average value of lendable securities. The average utilization of U.S. Corporate Bonds and Equity securities was 15% through September 30, 2018 and 12% through September 30, 2017.

The average value of U.S. Government securities on loan through September 30, 2018, was $1,081 million, as compared to $1,421 million through September 30, 2017. The average value of U.S. Government securities on loan was 27% of the $4,026 million average value of securities on loan through September 30, 2018, as compared to 40% of the $3,576 million average value of securities on loan through September 30, 2017. The average value of lendable U.S. Government securities through September 30, 2018, was $4,879 million, or 17 percent of PBGC's overall average value of lendable securities; whereas the average value of lendable U.S. Government securities through September 30, 2017, was $4,578 million, or 17 percent of PBGC's overall average value of lendable securities. The average utilization of U.S. Government securities was 23% through September 30, 2018 and 31% through September 30, 2017. The decrease in the utilization of U.S. Government securities was driven by an increase in the issuance of Treasury Bills which results in less need to borrow U.S. Government securities in the securities lending market.

The following table presents utilization rates of investment securities in the Securities Lending Program.

UTILIZATION RATES OF SECURITIES LENDING PROGRAM

	Daily Utilization Rates at Sept. 30, 2018	Sept. 30, 2018 Average Utilization Rates	Sept. 30, 2017 Average Utilization Rates
U.S. Corporate Bond & Equity	17%	15%	12%
U.S. Government Securities	29%	23%	31%
Non-U.S. Corporate Bond & Equity	2%	2%	2%
Non- U.S. Fixed Income	0%*	2%	3%
Total PBGC Program	16%	14%	13%

* Less than 1%

The amount of cash collateral received for securities on loan at September 30, 2018, and September 30, 2017, was $4,010 million and $3,106 million, respectively. These amounts are recorded as assets and are offset with a corresponding liability. For lending agreements collateralized by securities, no accompanying asset or liability is recorded, as PBGC does not sell or re-pledge the associated collateral. For those securities lending activities that PBGC directs through its custodian manager, the Corporation chooses to invest proceeds from securities lending in the Quality A cash collateral pool. PBGC earned $16 million from its agency securities lending programs as of September 30, 2018. Also contributing to PBGC's securities lending income is its participation in certain pooled index funds. Net income from securities lending is included in "Investment income – Fixed" on the Statements of Operations and Changes in Net Position.

PBGC does not have the right by contract or custom to sell or re-pledge non-cash collateral, and therefore it is not reported on the Statements of Financial Position. Non-cash collateral, which consists of highly rated debt instruments, has decreased year over year.

REPURCHASE AGREEMENTS

PBGC's repurchase agreements entitle and obligate the Corporation to repurchase or redeem the same or substantially the same securities that were previously transferred as collateralized securities. In addition, repurchase agreements require the Corporation to redeem the collateralized securities, before maturity at a fixed determinable price.

As of September 30, 2018, PBGC had $404 million in repurchase agreements. This amount represents maturities of one day and is reported as an asset and included in the "Cash and cash equivalents" balance. There was no associated liability for these secured borrowings reported as "Securities sold under repurchase agreements." PBGC has no restrictions placed on the cash received for all of its outstanding repurchase agreements as of September 30, 2018.

NOTE 4: DERIVATIVE CONTRACTS

PBGC's derivative financial instruments are recorded at fair value and are included on the Statements of Financial Position as investments and derivative contracts. Foreign exchange forwards are included in "Fixed maturity securities." Swaps are netted for the individual contracts as "Receivables, net – Derivative contracts" and "Derivative contracts" (liabilities). Bond forwards and TBAs are reclassified as "Receivables, net – Sale of securities" and "Due for purchases of securities" from derivative contracts receivables and payables. The amounts subject to credit risk related to derivative instruments are generally limited to the amounts, if any, by which the counterparty's obligations exceed PBGC's obligations with that counterparty. PBGC considers this risk remote and does not expect the settlement of these transactions to have a material effect in the Statements of Operations and Changes in Net Position and Statements of Financial Position.

Amounts in the table below represent the derivative contracts in a receivable position at September 30, 2018. Collateral deposits of $370 million, which represent cash paid as collateral on certain derivative contracts, are shown below.

DERIVATIVE CONTRACTS

(Dollars in millions)	**September 30, 2018**	September 30, 2017
Open receivable trades on derivatives:		
Collateral deposits	**$370** [1]	$80 [2]
Futures contracts	**2**	4
Interest rate swaps	**39**	29
Other derivative swaps	**38**	99
Total	**$449**	$212

[1] For fiscal year 2018, where a legally enforceable master netting agreement exists, collateral deposits receivable for derivative contracts will include counterparty netting. Collateral deposits receivable of $370 million are the result of $379 million gross collateral deposits receivable less $9 million collateral deposits payable netted for swap derivative counterparties.

[2] For fiscal year 2017, where a legally enforceable master netting agreement exists, collateral deposits receivable for derivative contracts will include counterparty netting. Collateral deposits receivable of $80 million are the result of $87 million gross collateral deposits receivable less $7 million collateral deposits payable netted for swap derivative counterparties.

Amounts in the Derivative Contracts table below represent derivative contracts in a payable position at September 30, 2018, which PBGC reflects as a liability. Collateral deposits of $40 million, which represent cash received as collateral on certain derivative contracts, are included.

DERIVATIVE CONTRACTS

(Dollars in millions)	**September 30, 2018**	September 30, 2017
Open payable trades on derivatives:		
Collateral deposits	**$40** [1]	$19 [2]
Futures contracts	**328**	25
Interest rate swaps	**23**	15
Other derivative swaps	**38**	100
Options-fixed income	**1**	2
Total	**$430**	$161

[1] For fiscal year 2018, where a legally enforceable master netting agreement exists, collateral deposits payable for derivative contracts will include counterparty netting. Collateral deposits payable of $40 million are the result of $49 million gross collateral deposits payable less $9 million collateral deposits payable netted for swap derivative counterparties.

[2] For fiscal year 2017, where a legally enforceable master netting agreement exists, collateral deposits payable for derivative contracts will include counterparty netting. Collateral deposits payable of $19 million are the result of $26 million gross collateral deposits payable less $7 million collateral deposits payable netted for swap derivative counterparties.

NOTE 5: FAIR VALUE MEASUREMENTS

FASB Accounting Standards Codification Section 820, *Fair Value Measurements and Disclosures*, provides a consistent definition of fair value and establishes a framework for measuring fair value in accordance with U.S. GAAP. It does not require the measurement of financial assets and liabilities at fair value. The standard is intended to increase consistency and comparability in, and disclosures about, fair value measurements by giving users better information about how extensively PBGC uses fair value to measure financial assets and liabilities, the inputs PBGC used to develop those measurements and the effect of the measurements, if any, on the financial condition, results of operations, liquidity and capital.

Section 820 defines fair value as the price that would be received to sell an asset or paid to transfer a liability (an "exit price") in the principal or most advantageous market for an asset or liability in an orderly transaction between market participants on the measurement date. When PBGC measures fair value for its financial assets and liabilities, PBGC considers the principal or most advantageous market in which the Corporation would transact. PBGC also considers assumptions that market participants would use when pricing the asset or liability. When possible, PBGC looks to active and observable markets to measure the fair value of identical, or similar, financial assets or liabilities. When identical financial assets and liabilities are not traded in active markets, PBGC looks to market observable data for similar assets and liabilities. In some instances, certain assets and liabilities are not actively traded in observable markets, and as a result PBGC uses alternative valuation techniques to measure their fair value.

In addition, Section 820 establishes a hierarchy for measuring fair value. That hierarchy is based on the observability of inputs to the valuation of a financial asset or liability as of the measurement date. The standard also requires the recognition of trading gains or losses related to certain derivative transactions whose fair value has been determined using unobservable market inputs.

PBGC believes that its valuation techniques and underlying assumptions used to measure fair value conform to the provisions of Section 820. PBGC has categorized the financial assets and liabilities that PBGC carries at fair value in the Statements of Financial Position based upon the standard's valuation hierarchy. The hierarchy gives the highest priority to quoted prices in active markets for identical assets or liabilities (Level

1), the next highest priority to pricing methods with significant observable market inputs (Level 2), and the lowest priority to significant unobservable valuation inputs (Level 3).

If the inputs used to measure a financial asset or liability cross different levels of the hierarchy, the categorization is based on the lowest level input that is significant to the fair value measurement. Management's assessment of the significance of a particular input to the overall fair value measurement of a financial asset or liability requires judgment, and considers factors specific to that asset or liability, as follows:

Level 1 - Financial assets and liabilities whose values are based on unadjusted quoted prices for identical assets or liabilities in an active market. PBGC's Level 1 investments primarily included are exchange-traded equity securities and certain U.S. Government securities.

Level 2 - Financial assets and liabilities whose values are based on quoted prices for similar assets and liabilities in active markets. PBGC also considers inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the asset or liability. Level 2 inputs to the valuation methodology include:

- Quoted prices for similar assets or liabilities in active markets. This includes cash equivalents, securities lending collateral, U.S. Government securities, asset backed securities, fixed foreign investments, corporate bonds, repurchase agreements, bond forwards, and swaps.
- Quoted prices for identical or similar assets or liabilities in non-active markets. This includes corporate stock, pooled funds fixed income, pooled funds equity, and foreign investments equity.
- Pricing models whose inputs are observable for substantially the full term of the asset or liability — included are insurance contracts and bank loans.
- Pricing models whose inputs are derived principally from or are corroborated by observable market information through correlation or other means for substantially the full term of the asset or liability.

Level 3 - Financial assets and liabilities whose values are based on prices or valuation techniques that require inputs that are both unobservable in the market and significant to the overall fair value measurement. These inputs reflect PBGC's judgment about the assumptions that a market participant would use in pricing the asset or liability and based on the best available information. The inputs or methodology used for valuing securities are not necessarily an indication of the risk associated with investing in those securities. PBGC includes instruments whose values are based on a single source such as a broker, pricing service, or dealer, which cannot be corroborated by recent market transactions. These include fixed maturity securities such as corporate bonds that are comprised of securities that are no longer traded on the active market and/or not managed by any asset manager. Equity securities such as corporate stocks are also included, comprised of securities that are no longer traded on the active market and/or not managed by any asset manager. Real estate funds that invest primarily in U.S. commercial real estate are valued based on each underlying investment within the fund/account; they incorporate valuations that consider the evaluation of financing and sale transactions with third parties, expected cash flows and market-based information, including comparable transactions, and performance multiples, among other factors.

The assets and liabilities that PBGC carries at fair value are summarized by the three levels required by Section 820 in the following table. The fair value of the asset or liability represents the "exit price" – the price that would be received to sell the asset or paid to transfer the liability.

(Dollars in millions)	Investment Measured at Net Asset Value	Quoted Market Prices in Active Markets (Level 1)	Pricing Methods with Significant Observable Market Inputs (Level 2)	Pricing Methods with Significant Unobservable Market Inputs (Level 3)	Total Net Carrying Value in Statements of Financial Position
Assets					
Cash and cash equivalents	$ -	$ 542	$ 5,118	$ -	$ 5,660
Securities lending collateral[4]	-	-	4,010	-	4,010
Investments:					
Fixed maturity securities					
U.S. Government securities	-	-	39,585	-	
Commercial paper/securities purchased under repurchase agreements	-	-	250	-	
Asset backed/Mortgage backed securities	-	-	3,123	-	
Pooled funds					
Domestic	-	47	0*	-	
International	-	-	-	-	
Global/other	-	-	-	-	
Corporate bonds and other	-	1	14,042	-	
International securities	-	(10)	8,883	-	
Fixed maturity securities at NAV	641	-	-	-	
Total Fixed Maturity Securities	641	38	65,883	-	66,562
Equity securities:					
Domestic	-	300	104	1	
International	-	1,949	4	0*	
Pooled funds					
Domestic	-	86	-	-	
International	-	-	-	-	
Global/other	-	-	-	-	
Equity Security at NAV	24,169	-	-	-	
Total Equity Securities	24,169	2,335	108	1	26,613
Private equity at NAV	510	-	-	-	510
Real estate and real estate investment trusts	-	1,234	-	7	
Real estate and real estate investment trusts at NAV	2,187	-	-	-	
Total Real Estate	2,187	1,234	-	7	3,428
Insurance contracts and other Investments	-	-	-	7	7
Receivables: [1]					
Derivative contracts[2]	-	2	447	-	449
Liabilities					
Payables: [1]					
Derivative contracts[3]	-	330	100	-	430

* Less than $500,000

1 Where a legally enforceable master netting agreement exists, amounts for “Receivables: Derivative contracts” and “Payables: Derivative contracts” will include counterparty netting against Level 2 financial assets and liabilities. The Collateral deposits associated with these related open receivables are $370 million ($379 million gross collateral deposits receivable less $9 million collateral deposits payable to derivative counterparties). The Collateral deposits associated with the related open payables are $40 million ($49 million gross collateral deposits payable less $9 million collateral deposits payable from derivative counterparties).

2 Derivative contracts receivables are comprised of open receivable trades on futures, swaps, and collateral deposits. See the Derivative Contracts table under Note 4.

3 Derivative contracts payables are comprised of open payable trades on futures, swaps, options, and collateral deposits. See the Derivative Contracts table under Note 4.

4 For securities lending details, please refer to the Securities lending section in Note 3 – Investments.

As of September 30, 2018, there were no significant transfers between Level 1 and Level 2. The end of the reporting period is the date used to recognize transfers between levels.

CHANGES IN LEVEL 3 ASSETS AND LIABILITIES MEASURED AT FAIR VALUE ON A RECURRING BASIS FOR THE YEAR ENDED SEPTEMBER 30, 2018

(Dollars in millions)	Fair Value at September 30, 2017	Total Realized and Unrealized Gains (Losses) included in Income	Purchases	Sales	Transfers Into Level 3	Transfers Out of Level 3	Fair Value at September 30, 2018	Change in Unrealized Gains (Losses) Related to Financial Instruments held at September 30, 2018[2]
Assets:								
Fixed	$ -	-	-	-	-	-	$ -	$ -
Pooled funds (fixed)	$74	-	-	-	-	(74)	$ -	$ -
Domestic/Int’l equity[1]	$0*	(8)	15	(6)	-	0*	$1	($8)
Private equity	$606	0*	-	-	-	(606)	$ -	$ -
Real estate & real estate investment trusts	$258	0*	-	(1)	-	(250)	$7	$0*
Other	$16	0*	7	(9)	-	(7)	$7	($1)

* Less than $500,000

1 Assets which are not actively traded in the market place.

2 Amounts included in this column solely represent unrealized gains and losses and cannot be derived from other columns from this table.

Pursuant to FASB Accounting Standards Codification Section 820, *Fair Value Measurements and Disclosures – Investments in Certain Entities That Calculate Net Asset Value per Share*; additional disclosures for investments priced at net asset value are discussed below.

INVESTMENTS IN CERTAIN ENTITIES THAT CALCULATE NET ASSET VALUE PER SHARE (OR ITS EQUIVALENT) FOR THE YEAR ENDED SEPTEMBER 30, 2018

	Net Asset Value (in millions)	Unfunded Commitments [1]	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
Real estate (a)	$ 3,428	$ 56[2]	n/a	n/a
Private equity (b)	510	94	n/a	n/a
Pooled funds (c)	24,943	-	n/a	n/a
Total	$28,881	$150		

[1] Unfunded amounts include recallable distributions. A substantial portion of the unfunded commitments is unlikely to be called.
[2] This amount includes unfunded commitments for Level 3 real estate.

a. This class includes 91 real estate investments that invest primarily in U.S. commercial real estate, and to a lesser extent, U.S. residential real estate. The fair value of each individual investment in this class has been estimated using the net asset value of PBGC's ownership interest in partners' capital. Generally, these investments do not have redemption provisions. Distributions from each fund are received as the underlying assets of the fund are liquidated which can extend 10 years or more from the inception date of the fund. In addition, distributions will also include any periodic income distributions received. No private real estate fund investments in this class are planned to be sold in the secondary market. Individual underlying portfolio investments are sold over time, which ultimately result in distributions from funds.

b. This class includes 353 private market investments that invest primarily in U.S. buyout and U.S. venture capital funds. These investments do not have redemption provisions. Instead, the nature of the investments in this class is that distributions are received through the liquidation of the underlying assets of the funds, which can extend 10 years or more from the inception of each individual fund. The fair value of each individual investment has been estimated using the net asset value of PBGC's ownership interest in partners' capital.

c. This class includes investments in unit trusts that are intended to match returns of domestic and international indices. Units reflect a pro-rata share of the fund's investments. The per unit net asset value is determined each business day based on the fair value of the fund's investments. Issuances and redemptions are possible daily when a per unit value is determined and are based upon the closing per unit net asset value.

PBGC uses recent prices of group annuities to derive the interest factors used to calculate the present value of future benefit-payment obligations. PBGC determines the interest-factor set that, when combined with a specified mortality table, produces present values that approximate the prices private insurers would charge to annuitize the same benefit-payment obligations.

Based on this valuation and in accordance with the provisions of the FASB Accounting Standards Codification Section 820, *Fair Value Measurements and Disclosures*, the significant unobservable inputs for the liability is the interest factor risk for Level 3 fair value measurements. A change in interest factors has an impact to the calculation of PBGC's PVFB, and the impact will be reflected in the "Due to change in interest factors." The table below summarizes the hypothetical results of using a 100 basis point difference causing the PVFB liability to increase (decrease) with a corresponding decrease (increase) in the interest factors. Furthermore, any such hypothetical change in the PVFB liability would have a corresponding effect on "Due to change in interest factors" expense.

HYPOTHETICAL AND ACTUAL INTEREST FACTOR SENSITIVITY CALCULATIONS OF PVFB SINGLE-EMPLOYER TRUSTEED PLANS AND MULTIEMPLOYER PROGRAM[1]

September 30, 2018 *(Dollars in millions)*	Sensitivity Factors Curve of One-Year Discount Rates (Interest Factors) - Varies Annually from 1.95% in year 1 for 30 years, 1.93% thereafter)	Official Factors[2] Curve of One-Year Discount Rates (Interest Factors) - Varies Annually from 2.95% in year 1 for 30 years, 2.93% thereafter)	Sensitivity Factors Curve of One-Year Discount Rates (Interest Factors) - Varies Annually from 3.95% in year 1 for 30 years, 3.93% thereafter)
Single-Employer Program	$111,271	**$100,113**	$ 90,861
Multiemployer Program	67,305	**56,153**	47,099
Total	$178,576	**$156,266**	$137,960

[1] Level 3 Fair Value Measurements.
[2] Actual factors and PVFB amounts calculated for September 30, 2018, fiscal year-end financial statements.

NOTE 6: PRESENT VALUE OF FUTURE BENEFITS

The PVFB is the estimated liability for future pension benefits that PBGC is or will be obligated to pay for trusteed plans and plans pending termination and trusteeship. For financial statement purposes, the net assets of plans pending termination and trusteeship (including estimated recoveries, assets, and miscellaneous liabilities) are included in the line item "Plans Pending Termination and Trusteeship." The estimated losses on probable future plan terminations are also included in the PVFB. The PVFB liability is stated as the actuarial present value of estimated future benefit payments.

PBGC uses a curve of one-year discount rates (interest factors). PBGC surveys life insurance industry annuity prices through the American Council of Life Insurers (ACLI) to obtain input needed to determine interest spread factors and then derives a 30 year curve of one-year rates that together with PBGC's mortality table will best match the private sector prices from surveys. Any curve of interest factors will generate liability amounts that differ from the survey prices, which cover 14 different ages or benefit timings for both male and female annuitants. The PBGC process derives the curve of interest factors that differs least over the range of prices in the survey. The derived rates in the curve are "spot" rates and then transformed into "forward" rates, because of the way they are applied in the present value calculations. For example, in a forward rate structure, discounting a payment due 25 years in the future requires use of 25 different rates, each associated with a one-year period, rather than by discounting using the single rate associated with year 25.

Illustrated in the table below is a September 30, 2017 to September 30, 2018 comparison of the curve of one-year discount rates (interest factors). For September 30, 2018 the curve of one-year discount rates (interest factors) which starts with an interest factor of 2.95% in year 1 and varies annually for each year thereafter until year 31 when the factor becomes 2.93% for the remaining years. For September 30, 2017, the curve of one-year discount rates started with an interest factor of 1.54% in year one and varies annually for each year thereafter until year 31 when the factor was 2.44% for the remaining years. These factors were determined to be those needed (given the mortality assumptions), to best match the survey of annuity prices provided by the ACLI. The one-year rates are derived from an underlying yield curve constructed to mimic the typical fixed income portion of portfolios that support life insurance annuity business, 1/3 Treasury securities and 2/3 high quality corporate bonds. The yield curve is adjusted to best fit unobserved factors that are reflected in the annuity price survey such as: differing mortality improvement expectations; hedging activities and their costs; regulatory costs on insurers; varying profit and book-of-business expectations; etc. The prices reflect rates at which, in PBGC's opinion, the liabilities (net of administrative expenses) could be settled in the market at September 30, for the respective year, for single-premium nonparticipating group annuities issued by private insurers. Many factors including Federal Reserve policy, changing expectations about longevity risk, and competitive market conditions may affect these rates.

CURVE OF ONE-YEAR DISCOUNT RATES (INTEREST FACTORS) FROM SEPTEMBER 30, 2017 TO SEPTEMBER 30, 2018

	09/30/2018	09/30/2017	Change		09/30/2018	09/30/2017	Change
Year 1	2.95%	1.54%	1.41%	Year 16	2.97%	2.56%	0.41%
Year 2	3.24%	1.69%	1.55%	Year 17	2.97%	2.63%	0.34%
Year 3	3.36%	2.07%	1.29%	Year 18	2.99%	2.76%	0.23%
Year 4	3.37%	2.45%	0.92%	Year 19	3.06%	2.95%	0.11%
Year 5	3.36%	2.62%	0.74%	Year 20	3.15%	3.16%	-0.01%
Year 6	3.49%	2.79%	0.70%	Year 21	2.52%	2.41%	0.11%
Year 7	3.48%	2.92%	0.56%	Year 22	2.46%	2.39%	0.07%
Year 8	3.45%	2.93%	0.52%	Year 23	2.39%	2.16%	0.23%
Year 9	3.52%	2.87%	0.65%	Year 24	2.31%	1.84%	0.47%
Year 10	3.43%	2.84%	0.59%	Year 25	2.23%	1.83%	0.40%
Year 11	3.23%	2.73%	0.50%	Year 26	2.18%	2.04%	0.14%
Year 12	3.13%	2.64%	0.49%	Year 27	2.22%	2.07%	0.15%
Year 13	3.04%	2.55%	0.49%	Year 28	2.34%	2.02%	0.32%
Year 14	2.99%	2.51%	0.48%	Year 29	2.50%	2.12%	0.38%
Year 15	2.97%	2.53%	0.44%	Year 30	2.77%	2.53%	0.24%
			Remaining Years		2.93%	2.44%	0.49%

PBGC uses a fully generational mortality projection scale. The mortality tables PBGC used for September 30, 2018 consisted of the Retirement Plan 2014 (RP-2014) Healthy Male mortality table times 1.09 and the RP-2014 Healthy Female mortality table times 0.99 each with adjustments before age 50 and projected generationally with the Male and Female Scale MP-2017 respectively. For September 30, 2017, PBGC used the same tables projected generationally with the Male and Female Scale MP-2016 respectively.

The expense reserve factor for administrative expenses beginning with the FY 2007 valuation is 1.37 percent plus additional reserves for cases in which plan asset determinations, participant database audits, and actuarial valuations were not yet complete. In addition to the completion of these milestones, PBGC continues to base the reserve on case size, number of participants, and time since trusteeship.

PBGC has in place a policy that allows the Corporation to not decrease a final benefit determination that is overstated by $5 or less. The effect of this policy is carried through to the calculation of the PVFB liability.

The PVFB for trusteed multiemployer plans for FY 2018 and FY 2017 reflect the payment of benefits and the changes in interest and mortality assumptions, expected interest, and the effect of experience.

The resulting liability represents PBGC's best estimate of the measure of anticipated experience under these programs.

The table below summarizes the actuarial adjustments, charges, and credits that explain how the Corporation's Single-Employer Program liability for the PVFB changed for the fiscal year ended September 30, 2018, and for the fiscal year ended September 30, 2017.

RECONCILIATION OF THE PRESENT VALUE OF FUTURE BENEFITS FOR THE YEARS ENDED SEPTEMBER 30, 2018 AND 2017

	September 30,			
(Dollars in millions)	**2018**		2017	
Present value of future benefits, at beginning of year -- Single-Employer, net		**$111,280**		$113,704
Estimated recoveries, prior year		**278**		568
Assets of terminated plans pending trusteeship, net, prior year		**36**		279
Present value of future benefits at beginning of year, gross		**111,594**		114,551
Settlements and judgments, prior year		**(18)**		(21)
Net claims for probable terminations, prior year		**(3,242)**		(376)
Actuarial adjustments -- underwriting:				
Changes in method and assumptions	**(400)**		(720)	
Effect of experience	**(127)**		(578)	
Total actuarial adjustments -- underwriting	**(527)**		(1,298)	
Actuarial charges -- financial:				
Expected interest	**1,668**		2,532	
Change in interest factors	**(7,608)**		(2,183)	
Total actuarial charges -- financial	**(5,940)**		349	
Total actuarial charges, current year		**(6,467)**		(949)
Terminations:				
Current year	**4,396**		997	
Changes in prior year	**7**		(169)	
Total terminations		**4,403**		828
Benefit payments, current year[1]		**(5,792)**		(5,699)
Estimated recoveries, current year		**(214)**		(278)
Assets of terminated plans pending trusteeship, net, current year		**(215)**		(36)
Settlements and judgments, current year [2]		**18**		18
Net claims for probable terminations:				
Future benefits[3]	**4,185**		7,917	
Estimated plan assets and recoveries from sponsors	**(2,386)**		(4,675)	
Total net claims, current year		**1,799**		3,242
Present value of future benefits, at end of year -- Single-Employer, net		**101,866**		111,280
Present value of future benefits, at end of year -- Multiemployer		**0***		0*
Total present value of future benefits, at end of year, net		**$101,866**		$111,280

* Less than $500,000 (actual amount is $85,920 and $132,338 for the 10 Pre-MPPAA (Multiemployer Pension Plan Amendments Act) trusteed multiemployer plans at September 30, 2018, and September 30, 2017, respectively).

1 The benefit payments of $5,792 million at September 30, 2018, and $5,699 million at September 30, 2017, include $35 million in FY 2018 and $13 million in FY 2017, respectively, for benefits paid from plan assets prior to trusteeship.

2 PBGC determined it is highly unlikely that more than half of the total potential future Page/Collins settlement liability will be paid. Accordingly, PBGC estimates that PBGC's future Page/Collins settlement liability amount was $18 million at September 30, 2018, and at September 30, 2017.

3 The future benefits for probable terminations of $4,185 million and $7,917 million for the periods ending September 30, 2018, and September 30, 2017, include $164 million and $139 million, respectively, for probable terminations not specifically identified, and $4,021 million and $7,778 million, respectively, for specifically identified probables.

The following table details the assets that make up single-employer terminated plans pending termination and trusteeship:

ASSETS OF SINGLE-EMPLOYER PLANS PENDING TERMINATION AND TRUSTEESHIP, NET

	September 30, 2018		September 30, 2017	
(Dollars in millions)	**Basis**	**Market Value**	Basis	Market Value
U.S. Government securities	**$1**	**$1**	$ -	$ -
Corporate and other bonds	**95**	**94**	15	15
Equity securities	**124**	**124**	21	21
Private equity	**-**	**-**	-	-
Insurance contracts	**-**	**-**	0 *	0 *
Other	**(3)**	**(3)**	-	-
Total, net	**$217**	**$216**	$36	$36

* Less than $500,000

NET CLAIMS FOR PROBABLE TERMINATIONS

Factors that at present are not fully determinable may be responsible for why these claim estimates differ from actual experience. Included in net claims for probable terminations is a provision for future benefit liabilities for plans not specifically identified. This reserve for small unidentified probable losses is recorded for the estimated future contingent losses stemming from insured single-employer plans with an aggregate underfunding of less than $50 million. The reserve is based on the historic three-year rolling average of actual plan terminations (with an aggregate underfunding of less than $50 million) and indexed to the S&P 500 to reflect changes in economic conditions. The September 30, 2018, Net Claims for Probable Terminations is $1,799 million, of which $1,635 million is from a specific identification process and $164 million is from the reserve for small unidentified probable losses.

The values recorded in the following reconciliation table have been adjusted to the expected dates of termination.

RECONCILIATION OF NET CLAIMS FOR PROBABLE TERMINATIONS

	September 30,			
(Dollars in millions)	**2018**		2017	
Net claims for probable terminations, at beginning of year		**$ 3,242**		$ 376
New claims	**-**		3,103	
Actual terminations	**(682)**		(231)	
Deleted probables	**-**		(18)	
Change in benefit liabilities	**(939)**		12	
Change in plan assets	**178**		-	
Loss (credit) on probables		**(1,443)**		2,866
Net claims for probable terminations, at end of year		**$1,799**		$3,242

The following table itemizes the single-employer probable exposure by industry:

PROBABLES EXPOSURE BY INDUSTRY (PRINCIPAL CATEGORIES)

(Dollars in millions)	**FY 2018**	FY 2017
Retail	**$1,635**	$2,421
Manufacturing	**-**	615
Forest Product	**-**	67
Total[1]	**$1,635**	$3,103

[1] Total excludes a small unidentified bulk reserve of $164 million and $139 million for September 30, 2018 and September 30, 2017, respectively.

For further detail regarding single-employer probables, see Note 2 under Present Value of Future Benefits (PVFB) subpoint (4) on pages 66-67.

The following table shows what has happened to plans classified as probables. This table does not capture or include those plans that were not previously classified as probable before they terminated.

ACTUAL PROBABLES EXPERIENCE

As Initially Recorded Beginning in 1987

(Dollars in millions)	Status of Probables from 1987-2017 at September 30, 2018			
Beginning in 1987, number of plans reported as Probable:	Number of Plans	Percent of Plans	Net Claim	Percent of Net Claim
Probables terminated	382	79%	$31,132	68%
Probables not yet terminated or deleted	2	0%*	2,421	5%
Probables deleted	103	21%	12,032	27%
Total	487	100%	$45,585	100%

*Less than 1%

NOTE 7: MULTIEMPLOYER FINANCIAL ASSISTANCE

PBGC provides financial assistance to multiemployer defined benefit pension plans in the form of loans. Since these loans are not generally repaid, an allowance is set up to the extent that repayment of these loans is not expected.

NOTES RECEIVABLE MULTIEMPLOYER FINANCIAL ASSISTANCE

(Dollars in millions)	**September 30, 2018**	September 30, 2017
Gross balance at beginning of year	**$1,180**	$1,036
Financial assistance payments	**153**	141
Financial assistance - premiums waived	**3**	3
Write-offs related to settlement agreements	**(1)**	0 *
Subtotal	**1,335**	1,180
Allowance for uncollectible amounts	**(1,335)**	(1,180)
Net balance at end of year	**$ -**	$ -

* Less than $500,000

The Underwriting losses from financial assistance and probable financial assistance are reflected in the Statements of Operations and Changes in Net Position and include period changes in the estimated present value of nonrecoverable future financial assistance. The Financial expenses related to financial assistance are presented as actuarial charges, credits, and adjustments for plans that are known to be insolvent as of the valuation date and/or have begun or are about to begin receiving financial assistance. In addition, a change in the valuation of the liability due to new data received (e.g., new plan expenses, more recent valuation liabilities, and new withdrawal payment schedules) is included as financial assistance from insolvent and probable plans on the Statements of Operations and Changes in Net Position. This valuation data change is a separate line item from actuarial adjustments and actuarial charges.

To determine the probable liability, ongoing plans are divided into segments based on the number of plan participants with different processes by plan size. The reserve for small ongoing plans (fewer than 2,500 participants) with probable losses not individually identified uses an aggregate method to estimate liability and exposure, rather than reviewing each plan individually, based on the use of seven years of plan termination history to project the current probable liability. For mid-sized plans (2,500 to 35,000 participants), risk-based rules are applied using a cash-flow model. For large plans (more than 35,000 participants), PBGC identifies ongoing high risk plans for a projection of the date of insolvency to measure the probable liability.

MPRA provides that certain plans may apply to the Department of the Treasury to suspend benefits, and provides for a participant vote on the benefit suspension. These plans also may apply to PBGC for financial assistance: either for a facilitated merger or a partition. Application for partition generally will occur in conjunction with an application to Treasury for benefit suspension. These actions are not considered in the determination of whether nonrecoverable future financial assistance is probable until the approval has been granted and Treasury has issued the final authorization to suspend benefits.

As of September 30, 2018, the Corporation expects that 184 individually identified multiemployer plans have exhausted or will exhaust plan assets and need financial assistance from PBGC to pay guaranteed benefits and plan administrative expenses. The present value of nonrecoverable future financial assistance for these 184 plans is $56,153 million (inclusive of the reserve for small ongoing plan losses not individually identified). The 184 plans fall into three categories: (1) plans currently receiving financial assistance; (2) plans that have terminated but have not yet started receiving financial assistance from PBGC; and (3) ongoing plans (not terminated) that the Corporation expects will require financial assistance in the future. The latter two categories comprise multiemployer probables as defined by the following classification criteria:

- Probable insolvent plan-terminated future probables: A plan that may still have assets, but the combination of plan assets and collectible payments of withdrawal liability are projected to be insufficient to cover plan benefits plus expenses.
- Probable insolvent plan-ongoing future probables: An ongoing plan with a projected date of insolvency within 10 years. Small plans with fewer than 2,500 participants are excluded from the plan count for this category. The liability for small plans is based on an aggregate method to determine a small plan bulk reserve.

MULTIEMPLOYER FINANCIAL ASSISTANCE

	September 30, 2018		September 30, 2017	
(Dollars in millions)	**Number of Plans**	**Net Liability**	Number Of Plans	Net Liability
Plans currently receiving financial assistance	**78** [1]	**$2,394**	72	$2,662
Plans that have terminated but have not yet started receiving financial assistance (classified as probable)	**64** [2]	**1,652**	68	1,966
Ongoing plans (not terminated) that the Corporation expects will require financial assistance in the future (classified as probable)	**42** [3]	**52,107** [4]	47	62,655 [4]
Total	**184**	**$56,153**	187	$67,283

[1] Six plans transferred from "Terminated but have not yet started receiving financial assistance" to "Plans currently receiving financial assistance", one plan transferred from remote to "Plans currently receiving financial assistance", and one plan was removed from inventory.
[2] Three plans transferred from remote to "Terminated but have not yet started receiving financial assistance" and one plan was removed from inventory.
[3] Three plans transferred from "Ongoing plans" to reasonably possible and one plan transferred from reasonably possible to "Ongoing plans".
[4] "Ongoing plans" include a small unidentified probable bulk reserve of $1,014 million and $1,080 million for September 30, 2018, and September 30, 2017, respectively.

Of the 184 plans:

a) 78 have exhausted plan assets and are currently receiving financial assistance payments from PBGC. The present value of future financial assistance payments for these insolvent 78 plans is $2,394 million.

b) 64 plans have terminated but have not yet started receiving financial assistance payments from PBGC. Terminated multiemployer plans no longer have employers making regular contributions for covered work, though some plans continue to receive withdrawal liability payments from withdrawn employers. In general, PBGC records a loss for future financial assistance for any underfunded multiemployer plan that has terminated. The present value of future financial assistance payments for these 64 terminated plans is $1,652 million.

c) 42 plans are ongoing (i.e., have not terminated), but PBGC expects they will exhaust plan assets and need financial assistance within 10 years. In this analysis, PBGC takes into account the current plan assets, future income to the plan, the statutory funding rules, and the possibility for future increases in contributions. The present value of future financial assistance payments for these 42 ongoing plans is $52,107 million.

PRESENT VALUE OF NONRECOVERABLE FUTURE FINANCIAL ASSISTANCE AND LOSSES FROM FINANCIAL ASSISTANCE

(Dollars in millions)	**September 30, 2018**	September 30, 2017
Balance at beginning of year	**$67,283**	$61,009
Changes in allowance:		
Losses (credits) from insolvent and probable plans - financial assistance	**(10,830)**	6,438
Actuarial adjustments	**(22)**	(40)
Actuarial charges (credits) - Insolvent plans:		
Due to expected interest	**40**	62
Due to change in interest factors	**(165)**	(45)
Financial assistance granted (previously accrued)	**(153)**	(141)
Balance at end of period	**$56,153**	$67,283

In the table above, actuarial charges are reported separately from "Losses (credits) from insolvent and probable plans-financial assistance." As a result, the table includes the following lines: Actuarial adjustments, Due to expected interest, and Due to change in interest factors. Insolvent plans are presented within these three actuarial charges (credits) lines. "Losses (credits) from insolvent and probable plans-financial assistance" include plans that terminated but have not yet received financial assistance, ongoing plans that PBGC expects will require financial assistance in the future, and those insolvent plans that have a change in liability due to new plan data included in the valuation.

NOTE 8: ACCOUNTS PAYABLE AND ACCRUED EXPENSES

The following table itemizes accounts payable and accrued expenses reported in the Statements of Financial Position:

ACCOUNTS PAYABLE AND ACCRUED EXPENSES

(Dollars in millions)	**September 30, 2018**	September 30, 2017
Annual leave	**$10**	$ 10
Other payables and accrued expenses	**65**	65
Accounts payable and accrued expenses	**$75**	$ 75

NOTE 9: REASONABLY POSSIBLE CONTINGENCIES

SINGLE-EMPLOYER PLANS

Single-employer plans sponsored by companies whose credit quality is below investment grade pose a greater risk of being terminated. The estimated unfunded vested benefits exposure amounts disclosed represent PBGC's estimates of the reasonably possible exposure to loss given the inherent uncertainties about these plans. In rare circumstances for certain large companies, the reasonably possible exposure calculation reflects the estimated unfunded guaranteed benefit determination rather than the estimated unfunded vested benefit determination.

In accordance with the FASB Accounting Standards Codification Section 450, *Contingencies*, PBGC classified a number of these companies that sponsor plans with total unfunded vested benefits greater than $50 million as reasonably possible rather than probable terminations, reflecting the sponsors' financial condition and other factors that did not indicate termination of their plans was likely. This classification was done based upon information about the companies as of September 30, 2018. PBGC criteria for a single-employer plan sponsor to be classified as Reasonably Possible are:

a. The sponsor(s) or significant member(s) of its controlled group (e.g., a parent or major subsidiary) is in reorganization under Title 11 of the United States Code.

b. An application for a funding waiver is pending or outstanding with the IRS.

c. A minimum funding contribution has been missed.

d. The sponsor(s) has an S&P senior unsecured credit rating or an issuer credit rating less two notches of BB+ or below, or a Moody's senior unsecured credit rating or a corporate family rating less one notch of Ba1 or below. If the controlled group is not rated by Moody's and S&P, PBGC will use the Dun & Bradstreet Financial Stress Score (if available) to classify the controlled group as Reasonably Possible or Remote.

e. The sponsor(s) has no bond rating, but analysis indicates that its unsecured debt would be below investment grade.

f. The sponsor(s) meets at least one of the PBGC "high risk" criteria.

g. Other (detailed explanation must be provided and be approved by PBGC's Contingency Working Group).

A reserve for the small unidentified reasonably possible exposure (companies that sponsor plans with less than $50 million in unfunded vested benefits) is calculated using an aggregate method to estimate liability and exposure, rather than reviewing each company individually.

The estimate of the reasonably possible exposure to loss for the single-employer plans of these companies was measured as of December 31, 2017. The reasonably possible exposure to loss was $175,439 million for FY 2018. This is a decrease of $62,749 million from the reasonably possible exposure of $238,188 million in FY 2017. This decrease is primarily due to the decline in the number of companies with lower than investment grade bond ratings and/or credit scores.

Except in the rare circumstances indicated earlier in this note, the estimate of unfunded vested benefits exposure to loss is not generally based on PBGC-guaranteed benefit levels, since data is not available to determine an estimate at this level of precision. PBGC calculated this estimate, as in previous years, by using the most recent data available from filings and submissions to the Corporation for plan years ended on or after December 31, 2016. PBGC adjusted the value reported for liabilities to December 31, 2017, using a select rate of 2.24% for the first 20 years and 2.59% thereafter and applying the expense load as defined in 29 CFR Part 4044, Appendix C. The rates were derived in conjunction with the 1994 Group Annuity Mortality

Static Table (with margins) projected to 2027 using Scale AA to approximate annuity prices as of December 31, 2017. The underfunding associated with these plans could be substantially different at September 30, 2018, because of changes in economic conditions between December 31, 2017, and September 30, 2018. PBGC did not adjust the estimate for events that occurred between December 31, 2017, and September 30, 2018.

The following table by industry itemizes the single-employer reasonably possible exposure to loss:

REASONABLY POSSIBLE EXPOSURE TO LOSS BY INDUSTRY (PRINCIPAL CATEGORIES)

(Dollars in millions)	**FY 2018**	FY 2017
Manufacturing [1]	**$66,802**	$93,139
Transportation, Communication and Utilities [2]	**46,203**	62,729
Services	**25,489**	36,590
Wholesale and Retail Trade	**9,801**	12,296
Health Care	**11,187**	12,273
Finance, Insurance, and Real Estate	**8,409**	11,614
Agriculture, Mining, and Construction	**7,548**	9,547
Total	**$175,439**	$238,188

[1] Primarily automobile/auto parts and fabricated metals.

[2] Primarily airlines.

MULTIEMPLOYER PLANS

Multiemployer plans that have become insolvent will require financial assistance. PBGC included amounts in the liability for the present value of nonrecoverable future financial assistance (see Note 7) for multiemployer plans that have become insolvent and for plans PBGC estimated that may require future financial assistance. In addition, PBGC estimated as of September 30, 2018, that it is reasonably possible that other multiemployer plans may require future financial assistance in the amount of $9,410 million.

PBGC calculated the future financial assistance liability for each multiemployer plan identified as probable (see Note 7), or reasonably possible. PBGC used a formula taking the present value of guaranteed future benefits and expense payments net of any future contributions or withdrawal liability payments. These amounts were as of the later of September 30, 2018, or the projected (or actual, if known) date of plan insolvency, discounted back to September 30, 2018. PBGC's identification of plans that are likely to require such assistance and estimation of related amounts required consideration of many complex factors, including estimating future cash flows, future mortality rates, and age of participants not in pay status. These factors are affected by future events, including actions by plans and their sponsors, most of which are beyond PBGC's control. Reasonably possible multiemployer classification is defined as an ongoing plan with a projected insolvency date between 10 and 20 years from the valuation date.

To determine the probable liability, ongoing plans are divided into segments based on the number of plan participants with different processes by plan size (see Note 7). The reserve for small unidentified probable losses (fewer than 2,500 participants) uses an aggregate method to estimate liability and exposure, rather than reviewing each plan individually, based on the use of seven years of plan termination history to project the current probable liability.

The reasonably possible exposure is derived from the total exposure for high risk plans by subtracting the probable liability for small plans. For mid-sized plans (2,500 to 35,000 participants), risk-based rules are applied using a cash-flow model. For large plans (more than 35,000 participants), PBGC identifies ongoing high-risk plans for a projection of the date of insolvency to measure the reasonably possible exposure.

NOTE 10: COMMITMENTS

PBGC's lease commitments for its office and field benefit administrators' facilities total $380.4 million in future years. These leases provide for periodic rate increases based on increases in operating costs and real estate taxes over the base amount. In FY 2021, PBGC will relocate to its new headquarters under a new 15 year leasing agreement (includes rent-free period for the first six months). The minimum future lease payments for PBGC facilities having non-cancellable terms in excess of one year as of September 30, 2018, are:

COMMITMENTS: FUTURE LEASE PAYMENTS

(Dollars in millions)	
Years Ending September 30,	Operating Leases
2019	$ 17.2
2020	15.4
2021	14.7
2022	27.0
2023	23.1
Thereafter	283.0
Minimum lease payments	$ 380.4

In addition to the committed minimum operating lease payments of $380.4 million as noted in the table above, PBGC has estimated future uncommitted operating leases of $2.1 million.

Lease expenses were $20.2 million in FY 2018 and $20.0 million in FY 2017.

NOTE 11: PREMIUMS

For both the Single-Employer and Multiemployer Programs, ERISA provides that PBGC continues to guarantee basic benefits despite the failure of a plan administrator to pay premiums when due. PBGC assesses interest and penalties on the late or unpaid portion of premiums. Interest continues to accrue until the premium and the interest due are paid. See Note 2, Premiums for PBGC's premium revenue accounting policy. For plan years beginning in 2018, the per-participant flat rate premium was $74 for single-employer pension plans and $28 for multiemployer plans. For plan years 2017 and 2016, the per-participant flat rate premiums for single-employer pension plans were $69 and $64, respectively, and for multiemployer plans, $28 and $27, respectively.

Single-employer plans also owe a variable rate premium (VRP) tied to the amount of underfunding. For plans years beginning in 2018, the VRP rate was $38 per $1,000 of unfunded vested benefits subject to an overall cap of $523 per participant. For plan years 2017 and 2016, the VRP rates were $34 and $30 respectively. Applicable caps for those plan years are shown in the table below.

The termination premium applies to certain plan terminations occurring after 2005. If a pension plan terminates in a distress termination pursuant to ERISA section 4041(c)(2)(B)(ii) or (iii), or in a PBGC-initiated termination under ERISA section 4042, the plan sponsor and its controlled group are liable to PBGC for a termination premium at the rate of $1,250 per plan participant per year for three years.

Net premium income for FY 2018 was $5,810 million and consisted of $3,702 million in variable rate premiums, $2,099 million in flat rate premiums, $54 million in termination premiums, and $2 million in interest and penalty income, offset by a bad debt expense of $47 million. Bad debt expenses include a reserve for uncollectible premium receivables (including flat, variable, termination premiums, and multiemployer insolvent plans), interest, and penalties.

Net premium income for FY 2017 was $7,030 million and consisted of $4,948 million in variable rate premiums, $2,077 million in flat rate premiums, $3 million in termination premiums, and $2 million in interest and penalty income, offset by a bad debt expense of $0.4 million. Bad debt expenses include a reserve for uncollectible premium receivables (including flat, variable, termination premiums, and multiemployer insolvent plans), interest, and penalties.

The following table shows the premium rates for 2016 through 2018:

PREMIUM RATES FOR SINGLE-EMPLOYER AND MULTIEMPLOYER PLANS

	Single-Employer Plans			Multiemployer Plans
	Flat Rate Premium	Variable Rate Premium		
Plan Years Beginning in	Rate Per Participant	Rate per $1,000 UVBs	Per Participant Cap	Flat Rate Premium Rate Per Participant
2018	$74	$38	$523	$28
2017	$69	$34	$517	$28
2016	$64	$30	$500	$27

Premium income is accrued for months in which a plan year overlaps the fiscal year. Because of this rule, premiums for 2016, 2017, and 2018 plan years are accrued in FY 2018, and premium rates change each calendar year, so three sets of premium rates were used to calculate FY 2018 premium revenue.

For example, consider a plan with a September 1, 2017 to August 31, 2018 plan year. Only the first month of that plan year occurs during FY 2017, so 1/12 of the plan's premium was accrued in FY 2017 and 11/12 accrued in FY 2018. Similarly, for a plan with a December 1, 2016 to November 30, 2017 plan year, the last two months of that plan year occur during FY 2018, so 2/12 of the plan's premium income was accrued in FY 2018 and 10/12 was accrued in FY 2017.

The following tables present a year-to-year comparison of key premium receivable information.

Net Premiums Receivable

(Dollars in Million)	Single-Employer Sept. 30, 2018	Single-Employer Sept. 30, 2017	Multiemployer Sept. 30, 2018	Multiemployer Sept. 30, 2017	Memorandum Total Sept. 30, 2018	Memorandum Total Sept. 30, 2017
Premiums Not Yet Due:						
Estimated Flat-Rate Premiums	**$1,123**	$1,086	**$152**	$160	**$1,275**	$1,246
Estimated Variable-Rate Premiums	**2,262**	2,918	**-**	-	**2,262**	2,918
Total Net Premiums Not Yet Due	**3,385**	4,004	**152**	160	**3,537**	4,164
Premiums Past Due:						
Flat-Rate Premiums	**92**	126	**20**	20	**112**	146
Allowance for Bad Debt-Flat-Rate	**(1)**	(3)	**0 ***	0 *	**(1)**	(3)
Variable-Rate Premiums	**102**	299	**-**	-	**102**	299
Allowance for Bad Debt-Variable-Rate	**(1)**	(6)	**-**	-	**(1)**	(6)
Total Net Premiums Past Due	**192**	416	**20**	20	**212**	436
Termination Premiums:[1]						
Termination Premiums	**303**	251	**-**	-	**303**	251
Allowance for Bad Debt-Termination	**(282)**	(233)	**-**	-	**(282)**	(233)
	21	18	**-**	-	**21**	18
Interest and Penalty:						
Interest and Penalty Due	**2**	2	**0 ***	0 *	**2**	2
Allowance for Bad Debt-Int/Penalty	**0 ***	(1)	**0 ***	0 *	**0 ***	(1)
Total Net Interest and Penalty Due	**2**	1	**0 ***	0 *	**2**	1
Grand Total Net Premiums Receivable	**$3,600**	$4,439	**$172**	$180	**$3,772**	$4,619

* Less than $500,000

[1] All termination premiums are due from plan sponsors that are either in distress or under Chapter 11 reorganization. In these cases, PBGC files claims in accordance with bankruptcy law along with all other creditors and is entitled only to a pro-rata share of any remaining assets. Depending on the circumstances of the bankruptcy proceedings, it can be years before PBGC receives its pro-rata distribution from the bankruptcy estate. In most cases, PBGC ultimately receives either nothing or only a very small fraction of its total claims filed.

The following tables present a year-to-year comparison of key premium income information.

PREMIUM INCOME BY PREMIUM TYPE

(Dollars in Million)	September 30, 2018	September 30, 2017
Flat-Rate Premium:		
Single-Employer	**$1,804**	$1,785
Multiemployer	**295**	292
Total Flat-Rate Premium	**2,099**	2,077
Variable-Rate Premiums	**3,702**	4,948
Interest and Penalty Income	**2**	2
Termination Premium	**54**	3
Less Bad Debts for Premiums, Interest, and Penalties	**(47)**	0 *
Total Net Premiums	**$5,810**	$7,030

* Less than $500,000

PREMIUM INCOME BY PROGRAM

(Dollars in Million)	September 30, 2018	September 30, 2017
Single-Employer:		
Flat-Rate and Variable-Rate Premiums	**$5,506**	$6,732
Interest and Penalty Income	**2**	2
Termination Premiums	**54**	3
Less Bad Debts for Premiums, Interest, and Penalties	**(44)**	2
Total Single-Employer	**5,518**	6,739
Multiemployer:		
Flat-Rate Premiums	**295**	293
Interest and Penalty Income	**0** *	0 *
Less Bad Debts for Premiums, Interest, and Penalties	**(3)**	(2)
Total Multiemployer	**292**	291
Total Net Premiums	**$5,810**	$7,030

* Less than $500,000

NOTE 12: LOSSES FROM COMPLETED AND PROBABLE TERMINATIONS

Amounts reported as losses are the present value of future benefits less related plan assets and the present value of expected recoveries from sponsors. The following table details the components that make up the losses:

LOSSES FROM COMPLETED AND PROBABLE TERMINATIONS – SINGLE-EMPLOYER PROGRAM

	For the Years Ended September 30,					
	2018			2017		
(Dollars in millions)	**New Terminations**	**Changes in Prior Years' Terminations[5]**	**Total**	New Terminations	Changes in Prior Years' Terminations[5]	Total
Present value of future benefits	**$4,419**	**$ 7**	**$4,426**	$ 997	($169)	$828
Less plan assets	**3,128**	**107**	**3,235**	471	299	770
Plan asset insufficiency	**1,291**	**(100)**	**1,191**	526	(468)	58
Less estimated recoveries	**-**	**(57)**	**(57)**	-	(290)	(290)
Subtotal	**1,291[1]**	**(43)**	**1,248**	526[1]	(178)	348
Settlements and judgments		**1[6]**	**1[6]**		2[6]	2[6]
Loss (credit) on probables	**(682)[2]**	**(889)[3]**	**(1,571)[4]**	(231)	2,994[3]	2,713[4]
Total	**$ 609**	**($931)**	**($322)**	$ 295	$ 2,768	$3,063

[1] Gross amounts for plans terminated during the period (64 plans at September 30, 2018 and 76 plans at September 30, 2017), including plans previously recorded as probables which have since terminated.

[2] Net claims for plans previously recorded as probables that terminated (Avaya and two Appleton Coated plans).

[3] Includes deleted probables and changes to old and new probables.

[4] See Note 6 - includes $682 million at September 30, 2018, and $231 million at September 30, 2017, previously recorded relating to plans that terminated during the period ("Actual terminations").

[5] Changes in prior years' terminations result from revaluations of DOPT assets (e.g., as identified in the plan asset reconciliation process), changes in plan recoveries at DOPT (e.g., from an estimated recovery amount to an expected recovery amount), and changes in DOPT PVFB (e.g., new liability data) for plans with termination dates prior to the current fiscal year in which they were added to PBGC's inventory of terminated plans.

[6] PBGC determined that it is highly unlikely more than half of the total potential future Page/Collins settlement liability will be paid. Accordingly, PBGC estimates that the PBGC's future Page/Collins settlement liability is $18 million at September 30, 2018 and as well as September 30, 2017.

NOTE 13: FINANCIAL INCOME

The following table details the combined financial income by type of investment for both the Single-Employer and Multiemployer Programs:

INVESTMENT INCOME SINGLE-EMPLOYER AND MULTIEMPLOYER PROGRAMS

(Dollars in millions)	**Single-Employer Program Sept. 30, 2018**	**Multiemployer Program Sept. 30, 2018**	**Memorandum Total Sept. 30, 2018**	Single-Employer Program Sept. 30, 2017	Multiemployer Program Sept. 30, 2017	Memorandum Total Sept. 30, 2017
Fixed maturity securities:						
Interest earned	**$2,343**	**$62**	**$2,405**	$1,886	$38	$1,924
Realized gain (loss)	**(1,146)**	**(71)**	**(1,217)**	351	11	362
Unrealized gain (loss)	**(2,629)**	**(43)**	**(2,672)**	(1,613)	(102)	(1,715)
Total fixed maturity securities	**(1,432)**	**(52)**	**(1,484)**	624	(53)	571
Equity securities:						
Dividends earned	**102**	**-**	**102**	87	-	87
Realized gain (loss)	**1,228**	**-**	**1,228**	775	-	775
Unrealized gain (loss)	**1,403**	**-**	**1,403**	3,591	-	3,591
Total equity securities	**2,733**	**-**	**2,733**	4,453	-	4,453
Private equity:						
Distributions earned	**2**	**-**	**2**	4	-	4
Realized gain (loss)	**138**	**-**	**138**	204	-	204
Unrealized gain (loss)	**(47)**	**-**	**(47)**	(79)	-	(79)
Total private equity	**93**	**-**	**93**	129	-	129
Real estate:						
Distributions earned	**0 ***	**-**	**0 ***	-	-	-
Realized gain (loss)	**19**	**-**	**19**	185	-	185
Unrealized gain (loss)	**86**	**-**	**86**	(40)	-	(40)
Total real estate	**105**	**-**	**105**	145	-	145
Other income:						
Distributions earned	**4**	**-**	**4**	10	-	10
Realized gain (loss)	**(1)**	**-**	**(1)**	1	-	1
Unrealized gain (loss)	**0 ***	**-**	**0 ***	1	-	1
Total other income	**3**	**-**	**3**	12	-	12
Total investment income	**$1,502**	**($52)**	**$1,450**	$5,363	($53)	$5,310

*Less than $500,000

NOTE 14: EMPLOYEE BENEFIT PLANS

All of PBGC's permanent full-time and part-time employees are covered by the Civil Service Retirement System (CSRS) or the Federal Employees Retirement System (FERS). Full-time and part-time employees with less than five years of service under CSRS and hired after December 31, 1983, are automatically covered by both Social Security and FERS. Employees hired before January 1, 1984, participate in CSRS unless they elected and qualified to transfer to FERS. Employees hired during the 2013 calendar year or rehired with less than five years of civilian service that is potentially creditable under FERS participate in FERS-Revised Annuity Employees (FERS-RAE). These employees are still generally considered part of the same pension system but are uniquely identified in human resources and payroll systems to annotate their higher contribution rate. Additionally, under the Bipartisan Budget Act of 2013, a new category of FERS employees was created: FERS-Further Revised Annuity Employees or FERS-FRAE. This pension system is again generally the same, only the contribution rate is changed. As with FERS-RAE employees, human resources and payroll systems use unique identifiers to annotate this higher contribution rate.

Total retirement plan expenses amounted to $26 million in FY 2018 and FY 2017. These financial statements do not reflect CSRS or FERS assets or accumulated plan benefits applicable to PBGC's employees. These amounts are reported by the U.S. Office of Personnel Management (OPM) and are not allocated to the individual employers. OPM accounts for federal health and life insurance programs for those eligible retired PBGC employees who had selected federal government-sponsored plans. PBGC does not offer other supplemental health and life insurance benefits to its employees.

NOTE 15: CASH FLOWS

The following table consists of detailed cash flows from the sales and purchases of investments. Sales and purchases of investments are driven by the level of newly trusteed plans, the unique investment strategies implemented by PBGC's investment managers, and the varying capital market conditions in which they invest during the year. These cash flow numbers can vary significantly from year to year based on the fluctuation in these three variables.

INVESTING ACTIVITIES (SINGLE-EMPLOYER AND MULTIEMPLOYER PROGRAMS COMBINED)

	September 30,	
(Dollars in millions)	**2018**	2017
Proceeds from sales of investments:		
Fixed maturity securities	**$108,910**	$98,490
Equity securities	**7,072**	5,040
Other/uncategorized	**5,104**	2,788
Memorandum total	**$121,086**	$106,318
Payments for purchases of investments:		
Fixed maturity securities	**($117,693)**	($102,976)
Equity securities	**(2,673)**	(4,278)
Other/uncategorized	**(3,620)**	(1,984)
Memorandum total	**($123,986)**	($109,238)

The following is a reconciliation between the net income as reported in the Statements of Operations and Changes in Net Position and net cash provided by operating activities as reported in the Statements of Cash Flows.

RECONCILIATION OF NET INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES

	Single-Employer Program		Multiemployer Program		Memorandum Total	
	September 30,		September 30,		September 30,	
(Dollars in millions)	**2018**	2017	**2018**	2017	**2018**	2017
Net income (loss)	**$13,353**	$9,666	**$11,176**	($6,219)	**$24,529**	$3,447
Adjustments to reconcile net income to net cash provided by operating activities:						
Net (appreciation) decline in fair value of investments	**1,005**	(3,302)	**126**	109	**1,131**	(3,193)
Net (gain) loss of plans pending termination and trusteeship	**(6)**	28	**-**	-	**(6)**	28
Losses (credits) on completed and probable terminations	**(322)**	3,063	**-**	-	**(322)**	3,063
Actuarial charges (credits)	**(6,468)**	(950)	**-**	-	**(6,468)**	(950)
Benefit payments - trusteed plans	**(5,757)**	(5,686)	**-**	-	**(5,757)**	(5,686)
Settlements and judgments	**(2)**	(5)	**-**	-	**(2)**	(5)
Cash received from plans upon trusteeship	**33**	20	**-**	-	**33**	20
Receipts from sponsors/non-sponsors	**579**	712	**-**	-	**579**	712
EL/DUEC Trusteeship interest (non-cash)	**(36)**	(183)	**-**	-	**(36)**	(183)
Cash receipts timing from Trust to Revolving	**-**	-	**-**	-	**-**	-
Amortization of discounts/premiums	**59**	76	**4**	7	**63**	83
Amortization and Depreciation expense	**13**	13	**-**	-	**13**	13
Bad debt expense/Write-offs (net)	**6**	26	**-**	-	**6**	26
Changes in assets and liabilities, net of effects of trusteed and pending plans:						
(Increase) decrease in receivables	**687**	41	**(1)**	(15)	**686**	26
Increase in present value of nonrecoverable future financial assistance	**-**	-	**(11,130)**	6,274	**(11,130)**	6,274
Increase (decrease) in unearned premiums	**(96)**	54	**3**	1	**(93)**	55
Increase (decrease) in accounts payable	**-**	(3)	**-**	2	**-**	(1)
Net cash provided (used) by operating activities	**$3,048**	$3,570	**$178**	$159	**$3,226**	$3,729

NOTE 16: LITIGATION

Legal challenges to PBGC's policies and positions continued in FY 2018. At the end of the fiscal year, PBGC had 23 active cases in state and federal courts and 196 bankruptcy and state receivership cases.

PBGC records as a liability on its financial statements an estimated cost for unresolved litigation to the extent that losses in such cases are probable and estimable in amount. PBGC cannot estimate with any degree of certainty the possible losses it could incur in the event it does not prevail in these matters.

NOTE 17: SUBSEQUENT EVENTS

Management evaluated subsequent events through publication on November 15, 2018, the date the financial statements were available to be issued. Events or transactions for either the single-employer or Multiemployer Program, occurring after September 30, 2018, and before the financial statements were available to be issued, that provided additional evidence about conditions that existed at September 30, 2018, have been recognized in the financial statements.

For the fiscal year ended September 30, 2018, there were no non-recognized subsequent events or transactions to report for both the Single-Employer and Multiemployer Programs that provided evidence about conditions that did not exist on September 30, 2018, and which arose before the financial statements were available to be issued.

IMPROPER PAYMENT REPORTING

INTRODUCTION

OMB Circular A-123, Appendix C, *Requirements for Payment Integrity Improvement* and related improper payment statutes[1] require federal agencies to conduct improper payment risk assessments. In compliance with Executive Order 13520, the PBGC Director serves as the agency official accountable for improper payment reporting purposes.

OMB's implementation guidance specifies that in performing a Step 1 risk assessment of improper payments, agencies must institute a systematic method of reviewing all programs or payment streams and identifying those that may be susceptible to significant risk of improper payments.

PBGC performs risk assessments of its payment streams using a rotational strategy based on a three-year cycle. PBGC's payment streams include the following: 1) benefit payments to participants in "final pay" status for plans trusteed by PBGC under Title IV of ERISA (Benefit Payments); 2) payments to contractors for goods and services, including government credit card transactions (Payments to Contractors); 3) payments made to federal employees, including payroll and travel reimbursements (Payments to Federal Employees); 4) financial assistance payments to insolvent multiemployer plans that are unable to pay benefits when due under the requirements of Title IV of ERISA (Financial Assistance Payments); and 5) refunds of previously-paid premiums (Premium Refunds). None of PBGC's payment streams have been previously determined to be susceptible to significant risk of improper payments as defined by statute or OMB guidance.

RESULTS OF THE FY 2018 IMPROPER PAYMENT RISK ASSESSMENT

In FY 2018, PBGC performed a risk assessment of two payment streams in accordance with our three-year rotation strategy. The two payment streams reviewed for FY 2018 include Benefit Payments and Premium Refunds. In performing these risk assessments, PBGC considered factors specified in statute and further defined in OMB guidance, including the complexity of the payment stream; the volume of payments; recent major changes in program funding, authorities, practices, or procedures; the level, experience, and quality of training for personnel responsible for making program eligibility determinations or certifying that payments are accurate; inherent risks of improper payments due to the nature of agency programs or operations; whether the program is new to the agency; whether payments or payment eligibility decisions are made outside of PBGC; and any significant deficiencies in the audit reports issued by the PBGC Office of Inspector General (OIG) and the Government Accountability Office (GAO), and the results from prior risk assessments.

To be considered susceptible to significant risk of improper payments, OMB guidance specifies that gross annual improper payments (i.e., the total amount of overpayments plus underpayments) within a payment stream would have to exceed (1) both 1.5 percent of program outlays and $10,000,000 of payments made during the reporting period or (2) $100,000,000 (regardless of the improper payment percentage of total program outlays). Based on the results of the Step 1 risk assessment, PBGC determined that the Benefit

[1] This references the Improper Payments Information Act of 2002 (IPIA), the Improper Payments Elimination and Recovery Act of 2010 (IPERA), and the Improper Payments Elimination and Recovery Improvement Act of 2012 (IPERIA).

Payments and Premium Refund payment streams were not susceptible to significant risk of improper payments as defined by the law and OMB implementing guidance.

FOLLOW-UP ON CORRECTIVE ACTIONS RELATING TO PRIOR RISK ASSESSMENTS

PBGC continues to follow-up on issues identified in connection with prior year risk assessments.

- Benefit Payments: The Office of Benefit Administration (OBA) has worked to implement corrective actions and take other steps to address legacy documentation issues associated with trusteed pension plans that were identified when PBGC conducted a pilot improper payment assessment in FY 2011. At that time, OMB advised that PBGC should focus its improper payment testing on payment accuracy and to implement strategies to improve pension-related documentation over time. OBA was formed as a result of a reorganization that was completed in FY 2016, and its new structure supports centralized documentation maintenance responsibilities and practices. Data collection and analysis is now centralized within its Data Management Division. To gain a fuller understanding of improper payment risks, OBA also completed an improper payment risk assessment and documented its risk responses. OBA has established monitoring and enforcement procedures to ensure documentation is imaged, archived and stored appropriately and compliance reviews are performed on a regular basis. In addition, OBA has taken steps to ensure that the source data used to support benefit calculations is clearly identified and maintained, has updated its policies to require explanations where data is found to be missing or unavailable, and has expanded its efforts to securely archive electronic data. OBA also provides training on the importance of document retention, archiving and imaging. Prior year improper payment assessments have found the Benefit Payment transaction cycle to be not susceptible to significant risk of improper payments and did not identify significant benefit calculation errors. In addition, during FY 2017, OBA formally documented a risk acceptance policy associated with legacy documentation issues. The risk acceptance policy remains in place given that there have been no significant changes to the impact and probability considerations related to legacy documentation issues.

PREVENTING AND DETECTING IMPROPER PAYMENTS

In addition to its periodic improper payment testing and in support of the Administration's Do Not Pay Initiative (DNP), PBGC employs a variety of means to prevent and detect improper payments on an ongoing basis:

- For all of its payment streams, PBGC has established controls to help ensure that payments are accurate and approved. For instance, pre-payment checks include ensuring that documentation for the payment is available for review by the approving official. On a post-payment basis, payment reconciliations are performed to help ensure completeness of payment processing and to identify errors. In addition, payments are subject to periodic compliance reviews.

- In FY 2018, under the direction of the Internal Control Committee, the Corporate Controls and Reviews Department worked with PBGC departments to improve controls over fraudulent and other improper payments in the areas of vendor payments during plan trusteeship, missing participants, benefit determinations and payments, plan asset evaluations, and multiemployer financial assistance.

- PBGC regularly performs electronic data analysis of payment transactions associated with Benefit Payments and Payments to Contractors – the two largest payment streams. This process helps to identify potential duplicate payments, other overpayments, and payment anomalies. When warranted, selected payments are subjected to additional research and analysis.

- For Benefit Payments, the largest payment stream, PBGC checks its participant database against the Social Security Administration's full Death Master File (DMF) available to Federal agencies paying government benefits, to help prevent sending payments to deceased individuals that should no longer be receiving benefits. The following table presents the results of DMF matching for FY 2018:

Use of the Death Match File To Prevent Improper Payments			
Number of Payments Reviewed	**Dollar Value of Payments Reviewed**	**Number of Payments Stopped**	**Dollar Value of Payments Stopped**
10.0 million	$5.7 billion	12,994	$6,668,783

- PBGC participates in the U.S. Department of the Treasury's DNP program. For example, under the Payments to Contractors stream, payments are screened on a post-payment basis to assess whether companies are receiving payments for work performed under PBGC contracts. Prior to payment, PBGC verifies that contractors are properly registered in the General Service Administration's System for Award Management (SAM), have not been debarred or suspended from contracting in the federal sector, and do not have federal debts that have been referred to the Department of the Treasury for collection. For FY 2018, PBGC did not identify any improper payments using the DNP process for the Payment to Contractors payment stream.

RECAPTURING IMPROPER PAYMENTS

Potential improper payments are subjected to further analysis based on the amount of the payment, the nature of the potential error, and other risk factors to determine whether amounts are due to PBGC. For Benefit Payments, PBGC has established procedures to recapture overpayments through electronic reclamation and debt collection agreements. PBGC forwards most of its benefit overpayment debts to the Centralized Receivables Service (CRS) of the Treasury Department to serve as its debt collection agent. CRS has the capability to enter into installment repayment agreements and offsets against other federal benefits. In some cases, recapture of payments may not be sought based on demonstration that a participant is experiencing financial hardship or other reasons. Other PBGC payment streams also have procedures in place to collect overpayments.

When it is suspected that PBGC payments were issued, misdirected, or obtained in a fraudulent manner, PBGC works closely with PBGC's Office of Inspector General (OIG). The OIG performs investigations of suspect transactions and, when appropriate, refers matters to the Department of Justice to determine whether there is a sufficient basis to initiate a civil or criminal prosecution. The OIG regularly reports its work on its website, https://oig.pbgc.gov, and in its *Semiannual Reports to Congress,* which are posted there.

In FY 2018, PBGC's OIG issued a special report, *White Paper: Detecting Fraud and Improper Payments Involving Deceased Participants,* (SR-2018-11), which reported 56 deceased participants receiving payments; these were missed by the full Death Master File, but accessible to the OIG under its authorities. Management is working with OIG and diligently following up on these cases. This is a key example of OIG work that improves the integrity of PBGC's programs.

2018 ACTUARIAL VALUATION

PBGC calculated and validated the present value of future PBGC-payable benefits (PVFB) for both the Single-Employer and Multiemployer Programs and of nonrecoverable future financial assistance (NRFFA) under the Multiemployer Program. Generally, we used the same methods and procedures as in 2017 for the Single-Employer and Multiemployer Programs.

PRESENT VALUE OF FUTURE BENEFITS AND NONRECOVERABLE FINANCIAL ASSISTANCE – 2018

	Number of Plans	Number of Participants (in thousands)	Liability (in millions)
I. SINGLE-EMPLOYER PROGRAM			
A. Terminated Plans			
1. Seriatim at fiscal year-end (FYE)	4,329	1,002	$69,279
2. Seriatim at DOPT, adjusted to FYE	187	182	18,546
3. Nonserieatim[1]	403	180	12,585
4. Missing Participants Program (seriatim)[2]	-	25	87
Subtotal	4,919	1,389	$100,497
B. Probable terminations (nonseriatim)[3]	2	91	4,185
Total[4]	4,921	1,480	$104,682
II. MULTIEMPLOYER PROGRAM			
A. Pre-MPPAA terminations (seriatim)	10	*	$0
B. Pre-MPPAA liability (net of plan assets)			
1. Currently Receiving Assistance	78	91	2,394
2. Probable for Assistance	106	1,185	53,759
Total	194	1,276	$56,153

* Fewer than 500 participants

Notes:

1) Liability for terminated plans includes an estimated liability of $18 million in settled litigation.
2) The Missing Participants Program refers to a liability that PBGC assumed for unlocated participants in plan terminations under PBGC's expanded missing participants program.
3) The net claims for probable plans reported in the financial statements include $164 million for not-yet-identified probable terminations. The assets for the probable plans, including the expected value of recoveries on employer liability and due-and-unpaid employer contributions claims, are $2,386 million. Thus, the net claims for probable terminations as reported in the financial statements are $4,185 million less $2,386 million, or $1,799 million.
4) The PVFB in the financial statements ($101,866 million) is net of estimated plan assets and recoveries on probable terminations ($2,386 million), estimated recoveries on terminated plans ($214 million), and estimated assets for plans pending trusteeship ($216 million), or, $104,682 million less $2,386 million less $214 million less $216 million or $101,866 million.

Single-Employer Program

PBGC calculated the Single-Employer Program's liability for benefits in the terminated plans and probable terminations, as defined in Note 2 to the financial statements, using a combination of two methods: seriatim and nonseriatim. For 4,329 plans, representing about 88 percent of the total number of single-employer terminated plans (72 percent of the total estimated number of participants in single-employer terminated plans), PBGC had sufficiently accurate data to calculate the liability separately for each participant's benefit (seriatim method). This was an increase of 42 plans over the 4,287 plans valued seriatim last year. For 187 plans whose data were not yet fully automated, PBGC calculated the benefits and liability seriatim as of the date of plan termination (DOPT) and brought the total amounts forward to the end of fiscal year 2018 on a nonseriatim basis.

For 403 other terminated plans, PBGC did not have sufficiently accurate or complete data to value individual benefits. Instead, the Corporation used a "nonseriatim" method that brought the plan liabilities from the plan's most recent actuarial valuation forward to the end of fiscal year 2018 using certain assumptions and adjustment factors.

For the fiscal year 2018 actuarial valuation, PBGC used a curve of one-year discount rates (interest factors) which varies annually from 2.95% in year 1 to 2.93% in year 31 and beyond. In fiscal year 2017, we used a curve of one-year discount rates (interest factors) which varies annually from 1.54% in year 1 to 2.44% in year 31 and beyond. The mortality tables used for valuing healthy lives were the adjusted RP-2014 Healthy Male and Female Tables, with blended healthy annuitant and employee tables before age 50 each projected generationally using Scale MP-2017. In fiscal year 2017, we used the same mortality tables, except with each table projected generationally using Scale MP-2016.

For non-pay-status participants, PBGC used expected retirement ages, as explained in subpart B of the Allocation of Assets in Single-Employer Plans regulation. PBGC assumed that participants who had attained their expected retirement age were in pay status. In seriatim plans, for participants who were older than age 65, were not in pay status, and were unlocated at the valuation date, PBGC reduced the value of their future benefits to zero over the three years succeeding age 65 to reflect the lower likelihood of payment. Similarly, for located participants over age 70 and not in pay status, PBGC reduced the value of their future benefits to zero. For deferred participants who were older than age 70 in the Missing Participant Program, PBGC reduced the value of their future benefits to zero over the ten years succeeding age 70 to reflect the lower likelihood of payment.

Multiemployer Program

PBGC calculated the liability for the 10 pre-MPPAA terminations using the same assumptions and methods applied to the Single-Employer Program.

PBGC based its valuation of the post-MPPAA liability for nonrecoverable future financial assistance on the most recent available actuarial reports, Form 5500 Schedule B or Schedule MB, as applicable, and information provided by representatives of the affected plans. The Corporation expected 184 individually identified multiemployer plans to need financial assistance because severe industrial declines have left them with inadequate contribution bases and they had insufficient assets for current payments or were expected to run out of assets in the foreseeable future.

Statement Of Actuarial Opinion

This valuation has been prepared in accordance with generally accepted actuarial principles and practices and, to the best of my knowledge, fairly reflects the actuarial present value of the Corporation's liabilities for the single-employer and multiemployer plan insurance programs as of September 30, 2018.

In preparing this valuation, I have relied upon information provided to me regarding plan provisions, plan participants, plan assets, and other matters, some of which are detailed in Note 6 of this Annual Report as well as a complete Actuarial Report available from PBGC.

In my opinion, (1) the techniques and methodology used for valuing these liabilities are generally acceptable within the actuarial profession; (2) the assumptions used are appropriate for the purposes of this statement and are individually my best estimate of expected future experience, discounted using current settlement rates from insurance companies as determined by PBGC's Policy Research and Analysis Department; and (3) the resulting total liability represents my best estimate of anticipated experience under these programs.

I, Scott Young, am the Chief Valuation Actuary of the PBGC. I am a Member of the American Academy of Actuaries, a Fellow of the Society of Actuaries and an Enrolled Actuary. I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Scott G. Young

Scott G. Young, FSA, EA, MAAA
Fellow of the Society of Actuaries
Enrolled Actuary
Member of the American Academy of Actuaries
Chief Valuation Actuary
Pension Benefit Guaranty Corporation
Director, Actuarial Services and Technology Department

INDEPENDENT AUDIT AND MANAGEMENT'S RESPONSE

November 15, 2018

To the Board of Directors
Pension Benefit Guaranty Corporation

The Office of Inspector General contracted with CliftonLarsonAllen LLP (CLA), an independent certified public accounting firm, to audit the financial statements of the Single-Employer and Multiemployer Program Funds administered by the Pension Benefit Guaranty Corporation as of and for the years ended September 30, 2018 and 2017. CLA conducted the audit in accordance with the following auditing standards: Generally Accepted Government Auditing Standards issued by the Comptroller General of the United States, and the Office of Management and Budget Bulletin No. 19-01, "Audit Requirements for Federal Financial Statements."

In their audit, CLA found:

- The financial statements present fairly, in all material respects, the financial position of the Single-Employer and Multiemployer Program Funds administered by the PBGC as of September 30, 2018 and 2017, and the results of their operations and cash flows for the years then ended, in accordance with accounting principles generally accepted in the U.S. This is the 26th consecutive unmodified financial statement audit opinion.
- PBGC maintained, in all material respects, effective internal control over financial reporting as of September 30, 2018, based on criteria established under 31 U.S.C. 3512 (c), (d), commonly known as the Federal Managers' Financial Integrity Act of 1982 (FMFIA) and OMB Circular A-123, Management's Responsibility for Enterprise Risk Management and Internal Control (0MB Circular A-123). Significant deficiencies in PBGC's internal control include (Controls over the Present Value of Future Benefit Liability, Present Value of Nonrecoverable Future Financial Assistance, and Access Controls and Configuration Management).
- An instance of potential noncompliance or other matters that are required to be reported in accordance with Government Auditing Standards. Specifically, PBGC may

not have been in compliance with law and regulation due to a potential violation of the Antideficiency Act determined after guidance from GAO relative to the recording of obligations for multi-year leases. PBGC has submitted the draft ADA report to OMB for external reporting, as required, and is in the process of remediating all leases to conform to GAO guidance.

CLA is responsible for the accompanying auditor's report dated November 15, 2018 and the conclusions expressed in the report. We do not express opinions on PBGC's financial statements or internal control over financial reporting, nor do we draw conclusions on compliance with laws and regulations. The financial statement audit report (AUD-2019-1/FA-18-127-1) is also available on our website at oig.pbgc.gov.

Respectfully,

Robert A. Westbrooks
Inspector General

cc: Thomas Reeder
Patricia Kelly
Alice Maroni
Ann Orr
David Foley
Karen Morris
Michael Rae
Robert Scherer
Judith Starr
Theodore Winter
Marty Boehm

CliftonLarsonAllen

CliftonLarsonAllen LLP
CLAconnect.com

INDEPENDENT AUDITORS' REPORT

To the Board of Directors, Management
and the Inspector General of the
Pension Benefit Guaranty Corporation

Report on the Financial Statements

We have audited the accompanying financial statements of the Pension Benefit Guaranty Corporation (PBGC), which comprise the statements of financial position as of September 30, 2018 and 2017, and the related statements of operations, net position and cash flows of the Single-Employer and Multiemployer Program Funds administered by the PBGC for the years then ended, and the related notes to the financial statements (financial statements).

Management's Responsibility for the Financial Statements

PBGC management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America (U.S.); this includes the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibilities

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of the financial statements in accordance with auditing standards generally accepted in the U.S.; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and Office of Management and Budget (OMB) Bulletin No. 19-01*, Audit Requirements for Federal Financial Statements* (OMB Bulletin 19-01). Those standards and OMB Bulletin 19-01 require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion on the Financial Statements

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Single-Employer and Multiemployer Program Funds administered by the PBGC as of September 30, 2018 and 2017, and the results of their operations and cash flows for the years then ended, in accordance with accounting principles generally accepted in the U.S.

Emphasis of Matter

In accordance with the Employee Retirement Income Security Act of 1974 (ERISA), PBGC's Single-Employer and Multiemployer Program Funds must be self-sustaining. As of September 30, 2018, PBGC reported in its financial statements a net surplus position (assets in excess of liabilities) of approximately $2 billion in the Single-Employer Program Fund and a deficit net position (liabilities in excess of assets) in the Multiemployer Program Fund of approximately $54 billion. As discussed in Note 9 to the financial statements, the potential losses from Single-Employer and Multiemployer plans whose termination is reasonably possible as a result of unfunded vested benefits are estimated to be approximately $175 billion and $9 billion, respectively. Management calculated the potential losses from single employer plans whose termination is reasonably possible based on the most recent data available from filings and submissions for plan years ended on or after December 31, 2016, and adjusted the value reported for liabilities to the estimated balance as of December 31, 2017, using actuarial assumptions. PBGC did not adjust the estimate for economic conditions that occurred between December 31, 2017 and September 30, 2018, and as a result, the actual financial position for the Single-Employer Program as of September 30, 2018 could be substantially different. In addition, PBGC's net deficit and long-term viability could be further impacted by losses from plans classified as reasonably possible (or from other plans not yet identified as potential losses) as a result of deteriorating economic conditions, the insolvency of a large plan sponsor, or other factors. PBGC has been able to meet its short-term benefit obligations; however, as discussed in Note 1 to the financial statements, management believes that barring changes, the Multiemployer program will with certainty not be able to fully satisfy PBGC's long-term obligations to plan participants. Our opinion is not modified with respect to this matter.

Other Information

The Message from Our Chair, Message from the Director, Annual Performance Report, Operations in Brief, Strategic Goals and Results, Independent Evaluation of PBGC Programs, Fiscal Year (FY) 2018 Financial Statement Highlights, Management's Discussion and Analysis, Analysis of Entity's Systems, Controls and Legal Compliance, Management Representation, Improper Payment Reporting, 2018 Actuarial Valuation, Letter of the Inspector General, and Management's Response to the Report of Independent Auditor and Organization contain a wide range of information, some of which is not directly related to the financial statements. This information is presented for purposes of additional analysis and is not a required part of the financial statements. This information has not been subjected to the auditing procedures applied in the audit of the financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

Report on Internal Control over Financial Reporting

We have audited PBGC's internal control over financial reporting as of September 30, 2018, based on criteria established under 31 U.S.C. 3512 (c), (d), commonly known as the Federal Managers' Financial Integrity Act of 1982 (FMFIA) and OMB Circular A-123, *Management's Responsibility for Enterprise Risk Management and Internal Control* (OMB Circular A-123).

Management's Responsibility for Internal Control

PBGC management is responsible for maintaining effective internal control over financial reporting, evaluating the effectiveness of internal control over financial reporting based on the criteria described above, and for its statement of assurance of the effectiveness of internal control over financial reporting, included in the Analysis of Entity's Systems, Controls and Legal Compliance section of the Annual Report.

Auditors' Responsibilities

Our responsibility is to express an opinion on PBGC's internal control over financial reporting based on our audit. We conducted our audit of internal control over financial reporting in accordance with auditing standards generally accepted in the U.S. and *Government Auditing Standards*.

An audit of internal control over financial reporting involves the assessment of the risk that a material weakness exists. The procedures performed depend on the auditors' judgment, and includes evaluating the design, and testing the operating effectiveness of, internal control over financial reporting based on the assessed risk. Our audit of internal control also considered the entity's process for evaluating and reporting on internal control over financial reporting based on the criteria described above. Our audit also included performing such other procedures as we considered necessary in the circumstances.

We did not evaluate all internal controls relevant to operating objectives as broadly established under FMFIA, such as those controls relevant to preparing performance information and ensuring efficient operations. We limited our internal control testing to testing controls over financial reporting. Our internal control testing was for the purpose of expressing an opinion on whether effective internal control over financial reporting was maintained, in all material respects. Consequently, our audit may not identify all deficiencies in internal control over financial reporting that are less severe than a material weakness.

Definitions and Inherent Limitations of Internal Control over Financial Reporting

An entity's internal control over financial reporting is a process effected by those charged with governance, management and other personnel, designed to provide reasonable assurance that (1) transactions are properly recorded, processed and summarized to permit the preparation of financial statements in accordance with accounting principles generally accepted in the U.S.; (2) assets are safeguarded against loss from unauthorized acquisition, use or disposition; and (3) transactions are executed in accordance with laws governing the use of budget authority and other applicable laws, regulations, contracts, and grant agreements that could have a direct and material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent, or detect and correct, misstatements due to fraud or error. We also caution that projecting our audit results to future periods is subject to the risk that controls may become inadequate because of changes in conditions or that the degree of compliance with controls may deteriorate.

Opinion on Internal Control over Financial Reporting

In our opinion, PBGC maintained, in all material respects, effective internal control over financial reporting as of September 30, 2018, based on criteria established under FMFIA and OMB Circular A-123.

In accordance with *Government Auditing Standards*, we are required to report findings of significant deficiencies. A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A significant deficiency is a deficiency, or combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance. We consider the following deficiencies in PBGC's internal control, which are described in Exhibit I, to be significant deficiencies:

1. Controls over the Present Value of Future Benefit Liability
2. Present Value of Nonrecoverable Future Financial Assistance
3. Access Controls and Configuration Management

Report on Compliance Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

Report on Compliance with Laws, Regulations, Contracts, and Grant Agreements

As part of obtaining reasonable assurance about whether PBGC's financial statements are free from material misstatement, we performed tests of the PBGC's compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct effect on the determination of material financial statement amounts and disclosures.

The results of our tests disclosed instances of noncompliance or other matters, described below and in Exhibit II, that are required to be reported in accordance with *Government Auditing Standards*.

- Potential Antideficiency Violation: PBGC maintains operating leases for all office site locations and its Continuity of Operations Plan (COOP) site. In the prior years, CLA found that PBGC did not record its full contractual obligation under all of its multiyear lease arrangements. We reported this as a potential violation in our FYs 2016 and 2017 Independent Auditors' Report. PBGC's General Counsel reported the potential violation to the Office of Management and Budget (OMB) in FY 2017 and is currently awaiting a decision.

- PBGC restructured two of six operating leases in response to the reported prior year potential violations. These two leases include contractual clauses requiring a period of six months' notice prior to exercising funding options, including obligating funds, as well as availability of funds clauses. However, PBGC may not have provided sufficient written notice to its landlords regarding the availability of funds for the remaining leases. Consequently, PBGC may have violated a provision within the Antideficiency Act.

Management's Responsibility for Compliance

Management is responsible for complying with laws, regulations, contracts, and grant agreements.

Auditors' Responsibilities

We are responsible for testing compliance with certain provisions of laws, regulations, contracts and grant agreements.

We did not test compliance with all laws, regulations, contracts, and grant agreements applicable to PBGC. We limited our tests to certain provisions of laws, regulations, contracts, and grant agreements noncompliance with which could have a direct effect on the determination of material financial statement amounts and disclosures. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. We caution that noncompliance may occur and not be detected by these tests and that such testing may not be sufficient for other purposes.

Purpose of the Report on Compliance

The purpose of the Report on Compliance is solely to describe the scope of our testing of compliance and the result of that testing, and not to provide an opinion on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering PBGC's compliance. Accordingly, this report is not suitable for any other purpose.

Management's Response to Findings

Management's response to the findings identified in our report is presented in Exhibit IV. We did not audit PBGC's response and, accordingly, we express no opinion on it.

Status of Prior Year's Control Deficiencies and Noncompliance Issues

We have reviewed the status of PBGC's corrective actions with respect to the findings included in the prior year's Independent Auditors' Report, dated November 15, 2017. The status of prior year findings is presented in Exhibit III.

CliftonLarsonAllen LLP

CliftonLarsonAllen LLP

Greenbelt, Maryland
November 15, 2018

EXHIBIT I

PENSION BENEFIT GUARANTY CORPORATION
INTERNAL CONTROL DEFICIENCIES
September 30, 2018

BACKGROUND

PBGC protects the pensions of approximately 37 million workers and retirees in more than 25 thousand private defined benefit pension plans. Under Title IV of the Employee Retirement Income Security Act of 1974 (ERISA), PBGC insures, subject to statutory limits, pension benefits of participants in covered private defined benefit pension plans in the U.S. The establishment of a robust internal control framework and the implementation of the appropriate internal control activities are essential to PBGC operations. OMB Circular A-123, *Management's Responsibility for Enterprise Risk Management and Internal Control,* requires agencies to integrate risk management and internal control functions. In FY 2018, the Corporation continues to evaluate whether its key internal controls are suitably designed across business processes to satisfy specific control objectives and mitigate the associated organization business risks.

PBGC continues to develop and execute corrective actions to remediate previously identified control deficiencies. PBGC management implemented certain corrective actions during FY 2018 that included enhancing the valuation tool to calculate its single largest liability, developing targeted financial analysis processes to mitigate financial reporting risks, and implementing IT solutions to mitigate system weaknesses. Although PBGC made some progress in these areas, the Corporation should continue to focus its efforts resolving the remaining outstanding conditions described below.

1. Controls over the Present Value of Future Benefit (PVFB) Liability

The PVFB liability represents the estimated liability for future benefits that PBGC is, or will be, obligated to pay participants of covered Single-Employer and certain Multiemployer pension plans. Over the past few years, the Office of Benefits Administration (OBA) has made strides to correct the systemic weaknesses identified in our testing of the IPV liability valuation. Specifically, PBGC made refinements to its actuarial valuation tool used to calculate the PVFB liability. These modifications enhanced the overall capability of the software tool and reduced the risk of reliance on imprecise assumptions. Although PBGC made improvements to some key limitations within its valuation tool, certain conditions remain and require management's continued focus.

<u>Calculation of the Present Value of Future Benefit Liability</u>

During FY 2018, we continue to identify errors in the calculation of participant benefits and the related PVFB liability. Specifically, our testing of the PVFB liability reported at June 30 and September 30 continued to reveal:

- Errors caused by system limitations or programming flaws
- Data entry errors and inaccurate use of plan data provisions
- Inconsistent valuation of mortality adjustments

Consistent with the prior year test results, we calculated an average error rate that exceeds more than 20% of samples tested. Using a statistically-based sampling technique, we found that the $69 billion liability could be misstated by approximately $596 million at September 30, 2018. The resolution of these errors requires management's continued focus to accurately calculate valuations for some participant's benefits and properly estimate and report related future liabilities.

Administrative Expense Assumptions

PBGC completed an experienced study to determine whether the assumptions used to estimate the administrative expenses for the PVFB liability should be updated based on historical experience in June 2018. This study concluded that an updated set of reserve factors and expense load percentages should be developed and used to calculate the present value of expenses for the PVFB liability. We found that PBGC did not use the most updated administrative expenses assumption to value the PVFB liability at September 30 as required by the Financial Accounting Standards Board Codification Section 960, *Defined Benefit Pension Plans*. Further, PBGC did not program its updated assumption into the Integrated Present Value of Future Benefit (IPFVB) software in a timely manner which resulted in an excess reserve of approximately $336 million to the PVFB liability at year-end.

Recommendations:

We recommend that PBGC management:

- Promptly correct the errors in its calculations identified by the auditors during the FY 2018 audit. **(OIG Control FS-18-01)**
- Review the Horizon Natural Resources Plan to ensure that other participants' benefits do not have both an early and late retirement factor applied. **(OIG Control FS-18-02)**
- Develop and document a consistent methodology for valuing the mortality adjustment. **(OIG Control FS-18-03)**
- Adjust the IPVFB valuation software to implement the new expense load approach. **(OIG Control FS-18-04)**
- Promptly correct the errors in its calculations identified by the auditors during the FY 2017 audit. **(OIG Control FS-17-01)**

2. Present Value of Nonrecoverable Future Financial Assistance (PV NRFFA)

The PV NRFFA represents the estimated nonrecoverable payments PBGC will make to certain multiemployer plans that will not be able to meet their benefit obligations to plan participants. Further, the classification of the future multiemployer liability is determined based on the projected date of insolvency.

In 2018, PBGC enhanced their valuation methodology to ensure that all relevant factors affecting the projected PV NRFFA were included. However, the Corporation did not sufficiently execute a comprehensive review process to identify errors in their valuation. Chapter 4 and Appendix Section 9.1 of the ASD Operational Procedures for the Valuation of the Single and Multiemployer Plans version FY 18.0 describes the procedures for handling the valuation of

PENSION BENEFIT GUARANTY CORPORATION
INTERNAL CONTROL DEFICIENCIES
September 30, 2018

the PV NRFFA liability and the reviews performed over the valuation to ensure adherence to established PBGC actuarial policies. Our testing revealed errors in the PV NRFFA liability due to data entry errors and inconsistent application of key assumptions used in the calculation. Consequently, these conditions resulted in misstatements to the PV NRFFA liability at June 30.

Also, we found a coding error in the IPVFB system related to the mortality assumption. In prior years, PBGC used a static mortality assumption to value the PV NRFFA liability. At the end of FY 2017, PBGC adopted an assumption that used a generational mortality versus static mortality. During FY 2018, PBGC did not perform adequate testing of the updated assumption to ensure that the system change performed the calculation as intended. This error resulted in a misstatement to the PV NRFFA liability and related loss reserve by approximately $250 million at September 30.

Recommendations:

We recommend that PBGC management:

- Promptly correct errors identified in FY2018 PV NRFFA testing. (**OIG Control FS-18-05**)
- Include a provision in Multiemployer (ME) procedures to require decisions made using actuarial judgement to be documented within the supporting file. (**OIG Control FS-18-06**)
- Review its process for testing changes in assumptions for calculating estimates to ensure impact in future years is considered in the testing. **(OIG Control FS-18-07)**
- Develop and implement a process to work with appropriate stakeholders in developing test scenarios. **(OIG Control FS-18-08)**
- Refine current quality control review procedures to effectively minimize data input errors. **(OIG Control FS-16-06)**

3. Access Controls and Configuration Management

In FY 2018, PBGC focused on resolving its access controls and configuration management weaknesses and continued to implement technologies and processes to address long standing weaknesses. However, the controls require time to mature and show evidence of their effectiveness, and a further reduction in manual intervention for the access controls to be more operationally effective. In addition, PBGC realizes it requires cycle time and institutional maturity to fully resolve some security weaknesses. Weaknesses in the PBGC IT environment continue to contribute to deficiencies in system configurations, access controls, and account management controls.

PBGC access and configuration management processes continued to evolve in FY 2018. For example, PBGC implemented various tools and processes to establish a more automated and up-to-date IT controls environment. However, continued focus is needed to effectively remediate the remaining risks and weaknesses associated with the access and configuration management controls. We continue to make the recommendations noted below to address

PENSION BENEFIT GUARANTY CORPORATION
INTERNAL CONTROL DEFICIENCIES
September 30, 2018

the underlying access controls and configuration management weaknesses in PBGC's information system security controls.
Access controls and configuration management controls are an integral part of an effective information security management program. Access controls limit or detect inappropriate access to systems, protecting the data from unauthorized modification, loss or disclosure. Agencies should have formal policies and procedures and related control activities should be properly implemented and monitored. Configuration management ensures changes to systems are tested and approved and systems are configured securely in accordance with policy.

An information system is comprised of many components[1] that can be interconnected in a multitude of arrangements to meet a variety of business, mission and information security needs. How these information system components are networked, configured and managed is critical in providing adequate information security and supporting an organization's risk management process.

PBGC has not fully addressed access controls and configuration management weaknesses, including:

- Implementation of controls to remedy vulnerabilities identified in key databases and applications, such as weaknesses in configuration, roles, privileges, auditing, file permission, and operating system access.
- Development and implementation of processes and procedures for determining and documenting defined security configuration checklists for database applications.
- Removal and decommission of systems and application software that have reached the end of their service life.
- Development and implementation of a plan of action to address known security weaknesses in accordance with PBGC's timeline for corrective action of vulnerabilities identified in vulnerability scans.
- Modernization of systems and applications to ensure the cryptography implemented is compliant with FIPS 140-2, *Security Requirements for Cryptographic Modules* and OMB A-130, *Managing Information as a Strategic Resource*.
- Development and implementation of project plans for satisfying the recommendations made in the *PBGC IT Infrastructure Operations Department (ITIOD) Risk Based Encryption Assessment*.
- Enhance PBGC policy to require System Owners to reconsider audit logging needs for major applications and revise the control inheritance for the Audit and Accountability control family.
- Full implementation of controls to remove separated users from systems and applications.
- Development and implementation of an account management monitoring program that ensures that accounts are constantly maintained in accordance with PBGC account management standards and that reduces the dependency on recertification.

[1] Information system components include, for example, mainframes, workstations, servers (e.g., database, electronic mail, authentication, Web, proxy, file, domain name), network components (e.g., firewalls, routers, gateways, voice and data switches, wireless access points, network appliances, sensors), operating systems, middleware, and applications.

PENSION BENEFIT GUARANTY CORPORATION
INTERNAL CONTROL DEFICIENCIES
September 30, 2018

- Implementation of requirements for the disposition of dormant accounts for all PBGC systems.

Recommendations:

We continue to recommend that PBGC management:

- Implement controls to remedy vulnerabilities identified in key databases and applications, such as weaknesses in configuration, roles, privileges, auditing, file permissions, and operating system access. **(OIG Control FS-07-14)**
- Fully implement controls to plan, remove and decommission unsupported systems and databases. **(OIG Control FS-16-07)**
- Develop and implement plan of action for addressing known security weaknesses. **(OIG Control FS-16-08)**
- Develop and implement plans for completing system technology upgrades or replacements to be compliant with FIPS 140-2 and OMB A-130. **(OIG Control Number FS-18-09)**
- Develop and implement project plans for satisfying the recommendations that were made in the *PBGC IT Infrastructure Operations Department (ITIOD) Risk Based Encryption Assessment*, dated June 29, 2018, version 1.0. **(OIG Control Number FS-18-10)**
- Fully implement Splunk Enterprise in PBGC, including its SIEM capability. **(OIG Control Number FISMA-15-01)**
- System Owners should conduct and document an analysis of major applications' critical auditable events and business transactions to identify audit logging needs and requirements. **(OIG Control Number FISMA-15-02)**[2]
- System Owners should develop and implement plans to fully implement Splunk Enterprise for their major applications. **(OIG Control Number FS-07-17)**[2]
- PBGC should modify the *PBGC Cybersecurity and Privacy Catalog* and other PBGC policies to allow the designation of "AU-2 Audit Events and AU-2(3) Audit Events and Reviews and Updates" as a shared control between the Office of Information Technology and the System Owner or a system-specific control. **(OIG Control Number FS-18-11)**
- Implement improved processes and provide training to ensure PBGC Federal Managers/CORs submit and approve separation requests prior (when applicable) to the effective separation date, as well as the collection of IT Assets by the effective separation date. **(OIG Control Number FS-18-12)**
- Implement improved processes and provide training to ensure PBGC Workplace Solutions Department removes physical access by the effective separation date. **(OIG Control Number FS-18-13)**
- OBA should document enhanced account management procedures to ensure a thorough review of accounts is performed during the annual account recertification and that necessary accounts are recertified, and implement compensating controls to verify inactive accounts are deactivated in accordance with PBGC policy. **(OIG Control FS-17-05)**

[2] The audit recommendation wording for FISMA-15-02 and FS-07-17 was revised during FY 2018.

EXHIBIT II

PENSION BENEFIT GUARANTY CORPORATION
NONCOMPLIANCE WITH LAWS AND REGULATIONS
September 30, 2018

NONCOMPLIANCE WITH THE ANTIDEFICIENCY ACT

Potential Noncompliance

Leases

PBGC reported an Antideficiency Act violation as the corporation had not recorded its full contractual obligation under all of the multiyear lease arrangements. In FY 2017, we reported that the Corporation may have violated the Antideficiency Act due to its failure to perform a sufficient review of all operating leases to determine whether it complied with the provisions for obligating multiyear term leases, as described in OMB Circular A-11, *Preparation, Submission and Execution of the Budget*. PBGC has subsequently restructured two of their six leases (Kingstowne and Wilmington) in response to the violations. These two leases include clauses requiring six months' notice prior to exercising option years and obligating funds, as well as added availability of funds clauses. PBGC executed supplemental lease agreements (SLAs) to affirmatively confirm the availability of funds with the property management when exercising the contract options.

PBGC did not provide evidence that the required communication was made to its landlords about the availability of funds prior to exercising its contract options under certain lease agreements that were not renegotiated. As a result, PBGC is at risk of receiving voluntary services and potentially violating the Antideficiency Act.

Recommendations:

We recommend that PBGC management:

- Perform a comprehensive review of all operating lease arrangements to determine whether they comply with the Antideficiency Act provisions, including voluntary services, as provided for in OMB Circular A-11 and report all potential violations to OMB immediately. **(BD-07)**[3]
- Develop and implement a remediation plan to resolve any current and future potential funding deficiencies related to operating lease arrangements. **(BD-08)**

[3] The audit recommendation wording for BD-07 was revised during FY 2018.

EXHIBIT III

PENSION BENEFIT GUARANTY CORPORATION
STATUS OF PRIOR YEARS' FINDINGS

Prior Year Condition	Status as Reported at September 30, 2017[4]	Status as of September 30, 2018
1. Controls over PVFB Liability	***Significant Deficiency:*** PBGC had weaknesses in the following: • Errors caused by system limitations or programming flaws. • Data entry errors and inaccurate use of plan data provisions.	Partially resolved and repeated as significant deficiency number 1 and included in Exhibit I.
2. Present Value of Nonrecoverable Future Financial Assistance (PV NRFFA)	***Significant Deficiency:*** PBGC had weaknesses in the following: • Using the most current and relevant data to update actuarial assumptions. • Data input errors used to calculate PV NRFFA.	Repeated as significant deficiency number 2 and included in Exhibit I.
3. Access Controls and Configuration Management	***Significant Deficiency:*** Weaknesses in the IT environment contributed to deficiencies in system configuration, access and account management controls, and monitoring.	Partially resolved and repeated as significant deficiency number 3 and included in Exhibit I.

[4] Report on Internal Control Related to Pension Benefit Guaranty Corporation's Fiscal Year 2017 and 2016 Financial Statements Audit: http://oig.pbgc.gov/pdfs/FA-17-119-3.pdf

EXHIBIT III

PENSION BENEFIT GUARANTY CORPORATION
STATUS OF PRIOR YEARS' FINDINGS

Compliance and Other Matters		
Potential Noncompliance Antideficiency Act	PBGC did not record its full contractual obligation under its current multiyear lease arrangement. PBGC has disclosed this matter to OMB and is currently awaiting a decision.	Repeated as a potential Noncompliance with Antideficiency Act in Exhibit II.

EXHIBIT III

PENSION BENEFIT GUARANTY CORPORATION
STATUS OF PRIOR YEARS' FINDINGS

Prior Year Internal Control Report Recommendations Closed During FY 2018	Date Closed	Original Report Number
FS-13-02	11/14/2018	AUD-2014-3/FA-13-93-2
FS-16-03	11/15/2018	AUD-2017-3/FA-16-110-2
FS 16-05	11/15/2018	AUD-2017-3/FA-16-110-2
FS-17-02	10/23/2018	AUD-2018-6/FA-17-119-3
FS-17-03	10/10/2018	AUD-2018-6/FA-17-119-3
FS-17-04	09/24/2018	AUD-2018-6/FA-17-119-3

EXHIBIT III

PENSION BENEFIT GUARANTY CORPORATION
STATUS OF PRIOR YEARS' FINDINGS

Open Recommendations as of September 30, 2018:

Recommendation	Report
Prior Years'	
FS-07-14	2008-2/FA-0034-2
FS-07-17	2008-2/FA-0034-2
FS-16-06	AUD-2017-3/FA-16-110-2
FS-16-07	AUD-2017-3/FA-16-110-2
FS-16-08	AUD-2017-3/FA-16-110-2
FS 17-01	AUD-2018-6/FA-17-119-3
FS-17-05	AUD-2018-6/FA-17-119-3
FISMA-15-01	EVAL 2016-7/FA-15-108-7
FISMA-15-02	EVAL 2016-7/FA-15-108-7
BD-07	AUD-2018-9/FA-17-119-4
BD-08	AUD-2018-9/FA-17-119-4
FY Ended September 30, 2018	

EXHIBIT IV

PENSION BENEFIT GUARANTY CORPORATION
MANAGEMENTS RESPONSE FY2018
INDEPENDENT AUDITOR REPORT
SEPTEMBER 30, 2018

PBGC
Protecting America's Pensions

Pension Benefit Guaranty Corporation
1200 K Street, N.W., Washington, D.C. 20005-4026

Office of the Director

NOV 15 2018

MEMORANDUM

To: Robert A. Westbrooks
Inspector General

From: W. Thomas Reeder
Director

Subject: Response to the Independent Auditor's Combined Audit Report for the FY 2018 Financial Statement Audit

Thank you, once again this year for the opportunity to comment on the Office of Inspector General's FY 2018 audit results regarding the agency's financial statements, internal controls, and compliance with laws and regulations. Given that PBGC protects the pensions of millions of Americans, it is especially noteworthy that our financial statements have once again received an unmodified opinion.

We agree with your opinion on internal controls and are fully committed to addressing the issues noted in this year's report. Work remains to be done, and as management completes it, we will certainly keep your office informed. Your attention to reviewing our corrective actions is especially appreciated.

cc:

Patricia Kelly
David Foley
Alice Maroni
Karen Morris
Ann Orr
Michael Rae
Robert Scherer
Judith Starr
Martin Boehm
Theodore Winter

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Alice Maroni

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Office of Inspector General

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