

Annual Report 2019

A MESSAGE FROM OUR CHAIR



The Pension Benefit Guaranty Corporation (PBGC or the Corporation) has played a vital role in protecting Americans' retirement benefits for the past 45 years. The PBGC's backstop—its guarantee of a portion of participants' pension benefits—makes a concrete difference in the lives of hard-working people.

On behalf of Treasury Secretary Steve Mnuchin, Commerce Secretary Wilbur Ross, and the PBGC, I am pleased to present the PBGC's FY 2019 Annual Report. The Annual Report provides important financial and operational information about PBGC's Single-Employer and Multiemployer Insurance Programs and activities.

The Board is proud of the PBGC's accomplishments this year, including its outreach efforts to employer and participant groups; high customer satisfaction scores; continued improvements on internal controls, including introduction of a new insider threat program; and its work with plan sponsors to better protect participants in active plans. We also welcome the new Director, Gordon Hartogensis, and are enthusiastic about the perspective and insights he brings to the PBGC.

We should not neglect, however, the fact that the PBGC's financial position is a tale of two programs. The Single-Employer Program continues to improve, but the Multiemployer Program remains in deep deficit. The Board is exceedingly concerned with the looming insolvency of the Multiemployer Program and is ready to work with Members of Congress and all stakeholders on a comprehensive and lasting solution to preserve the federal backstop and safeguard pension benefits.

Eugene Scalia Secretary of Labor

Chair of the Board

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A MESSAGE FROM THE DIRECTOR



We recently marked the 45th anniversary of the Pension Benefit Guaranty Corporation (PBGC or the Corporation). Since 1974, PBGC has played a vital role in protecting the retirement security of millions of American workers and retirees. First, as a guarantor, the Corporation provides insurance coverage for the retirement benefits of over 35 million workers and retirees. Second, as trustee and administrator, the Corporation provides retirement security for about 1.5 million participants and beneficiaries in more than 4,900 plans that have failed since PBGC was established.

The Corporation is in a difficult financial position today. The Single-Employer Program continues to see improvement; however, it still faces considerable risk. The Multiemployer Program faces a crisis that threatens the retirement security of millions of American workers, retirees, and their families. Without reforms, our Multiemployer Insurance Program - the backstop that is the last resort for retirees when a plan fails - is very likely to become insolvent in 2025, leaving participants and beneficiaries with significantly less than the level of benefits guaranteed by the PBGC. The alarm bells are ringing, and legislative changes are necessary.

PBGC will continue to provide ongoing technical support to policymakers, stakeholders, and plan sponsors to help preserve plans and protect participants and their families. Congress should enact a long-term, sustainable bipartisan solution that appropriately balances the interests of retirees, workers, taxpayers, plans, employers, and unions in improving retirement security for hard-working Americans and their families. I look forward to working with all stakeholders - the White House, the Departments of Labor, Treasury, and Commerce, Congress, the multiemployer plan community, workers, employers, unions, and retirees - to find a responsible legislative solution.

Another priority at PBGC is updating technology. In FY 2019, PBGC took responsibility for the benefits of more than 103,000 participants in newly trusteed plans. In order to provide the highest level of customer support, PBGC is modernizing its benefits payments processing and financial systems. In addition to improved customer service and productivity, a goal of IT modernization is to give PBGC the flexibility to handle any future legislative changes that may impact our Multiemployer Program.

Mitigating data loss is another critical priority. As technology advances, there is evidence that attacks are occurring more frequently. We have begun to build a robust insider threat program and have formally established a cross-departmental working group to update policies, procedures and technology. This will better protect data from inadvertent or intentional loss or misuse and enable us to effectively respond to insider threats. The Corporation has also launched a data loss prevention tool to prevent data leakage and monitor unusual activity.

I am proud to lead PBGC's talented staff, who are passionate about the Corporation's mission. PBGC's team of committed professionals understand that what they do has a real impact on people. I look forward to successfully leading PBGC to provide the highest-level of customer support to workers and retirees, ensure its viability, and help it prepare for the future.

Gordon Hartogensis

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Director

November 15, 2019

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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 28, 2019; and Circular No. A-136 Revised, "Financial Reporting Requirements," Office of Management and Budget, June 28, 2019. 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

Since the enactment of the Employee Retirement Income Security Act of 1974 (ERISA), the Pension Benefit Guaranty Corporation (PBGC or the Corporation) has insured the defined benefit pensions of millions of workers and retirees employed in the private sector.

PBGC's two insurance programs are legally separate and operationally and financially independent. These programs protect the retirement security of over 35 million American workers, retirees, and beneficiaries in both single-employer and multiemployer plans.

PBGC's Single-Employer Program pays guaranteed benefits directly to retirees and beneficiaries in failed plans, while the Multiemployer Program provides financial assistance to insolvent plans to allow them to pay guaranteed benefits and reasonable administrative expenses. Looking ahead, increased claims for financial assistance make the insolvency of PBGC's Multiemployer Program highly likely to occur during FY 2025.

The Corporation's three strategic goals are:

- 1. Preserve plans and protect the pensions of covered workers and retirees.
- 2. Pay pension benefits on time and accurately.
- 3. Maintain high standards of stewardship and accountability.

OPERATIONS IN BRIEF

For the past 45 years, PBGC has strengthened retirement security by preserving plans and protecting participants and their families. In FY 2019, the Corporation made benefit payments of over \$6 billion to more than 932,000 people as highlighted in Table 1.

TABLE 1: FY 2019 OPERATIONS IN BRIEF				
	Target	2019	2018	
GOAL 1: Preserve Plans and Protect Pensions				
Participants Protected in Single-Employer Plans Sponsored by Employers Emerging from Bankruptcy		12,000	52,000	
Standard Termination Audits of Single-Employer Plans: Additional Payments		\$5.1 M paid to 993 people	\$12.2 M paid to 4,157 people	
Single-Employer Participants Receiving Benefits		932,000	861,000	
Single-Employer Participants to Receive Benefits in the Future		591,000	532,000	
Multiemployer Participants Receiving Benefits		66,900	62,300	
Multiemployer Participants to Receive Benefits in the Future		27,300	27,800	
GOAL 2: Pay Timely and Accurate Benefits				
Estimated Benefits Within 10% of Final Calculation	95%	96%	93%	
Average Time to Provide Benefit Determinations (Years)	4.3	5.6	6.1	
Improper Payment Rates Within OMB Threshold.1	<1.5%	Yes	Yes	
Applications Processed in 45 Days	87%	90%	91%	
GOAL 3: Maintain High Standards of Stewardship and Accounta	bility			
Retiree Satisfaction – ACSI. ² Score	90	91	89	
Caller Satisfaction – ACSI Score	85	84	84	
Premium Filer Satisfaction – ACSI Score	74	74	76	
Overall Customer Satisfaction. ³ Score	80	73	77	
Financial Net Position – Single-Employer		\$8.7B	\$2.4B	
Financial Net Position – Multiemployer		(\$65.2B)	(\$53.9B)	
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.

STRATEGIC GOALS AND RESULTS

PBGC's FY 2019 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 participants by administering two separate insurance programs. The Multiemployer Program protects 10.8 million workers and retirees in about 1,400 pension plans. The Single-Employer Program protects 24.7 million workers and retirees in about 24,000 pension plans.

MULTIEMPLOYER PROGRAM

The Multiemployer Program covers defined benefit pension plans that are created through a collective bargaining agreement between employers and a union. The employers are usually in the same or related industries, such as transportation, construction, mining, and hospitality.

PBGC provides financial assistance to insolvent multiemployer plans and offers technical assistance to plan administrators, service providers, and other stakeholders. In FY 2019, PBGC paid \$160 million in financial assistance to 89 insolvent multiemployer plans, including four plans that were closed out by annuity purchases. At year-end, 85 insolvent plans are expected to continue to receive financial assistance covering about 66,900 participants currently receiving guaranteed benefits. An additional 27,300 people are entitled to benefits once they retire.

The Corporation performed audits of eight multiemployer plans covering more than 10,000 people. The objectives of the audits are to ensure timely and accurate benefit payments to all participants, compliance with laws and regulations, and effective and efficient management of the remaining assets in terminated and insolvent plans.

PBGC approved four requests for two-pool alternative allocation methods under section 4211(c)(5) of ERISA, one request to adopt a special withdrawal liability rule under section 4203(f) of ERISA, and one bond variance request under section 4204 of ERISA.

To assist plans in making more complete formal requests, PBGC's Multiemployer Division provided consultations and guidance to plan sponsors and practitioners on partition and merger applications, alternative withdrawal liability requests, plan insolvency, and Title IV compliance issues.

Multiemployer Plan Partitions and Applications for Benefit Suspensions

PBGC also continues to implement changes mandated by the Multiemployer Pension Reform Act of 2014 (MPRA). This law 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 request partition assistance from PBGC. 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 and that a partition is expected to result in the plan's long-term solvency. When 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.

Plans applying for a partition are also required to apply to the Treasury Department for a suspension of benefits. Applications must include 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 2019, PBGC issued an order partitioning the Teamsters 805 Pension and Retirement Plan (805 Plan) covering about 2,000 participants. PBGC also issued an order partitioning the Plasters & Cement Masons Local No. 94 Pension Plan (CM 94 Plan) covering approximately 100 participants. PBGC began providing financial assistance to the 805 Plan and the CM 94 Plan by moving a portion of the plans' guaranteed benefit obligations to new, separate plans and reimbursing the costs of those new, separate plans.

Multiemployer Plan Mergers and Transfers

PBGC also continues to implement other changes mandated by MPRA. Plan mergers can help protect the benefits of participants in multiemployer plans and make the merged plan more sustainable in the future. In general, mergers can broaden a plan's contribution base, reduce plan administrative and investment expenses, and rescue troubled plans from projected insolvency. Similarly, transfers of assets and liabilities between plans 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 2019, PBGC issued compliance determinations for six multiemployer plan mergers. PBGC also issued one compliance determination for a transfer of liabilities and assets between multiemployer plans.

Joint Select Committee on Solvency of Multiemployer Plans

The Bipartisan Budget Act of 2018 (Pub. L. 115-123) created the Joint Select Committee on Solvency of Multiemployer Pension Plans (Select Committee) to develop legislative recommendations designed to improve the solvency of multiemployer pension plans and the Corporation. Under the statute creating the Select Committee, PBGC provided technical assistance to the Select Committee in carrying out its duties. At the Select Committee's request, PBGC detailed three multiemployer pension experts to the Select Committee. The Select Committee did not issue legislative recommendations before the statutory deadline of November 30, 2018. By law, the Select Committee ceased to exist on December 31, 2018.

SINGLE-EMPLOYER PROGRAM

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

As part of its risk mitigation activities, PBGC identifies transactions and events that may pose risks to plan participants. The Corporation works collaboratively with employers to better safeguard pension benefits.

Standard Terminations

A company can end a fully funded plan in a standard termination by paying all the benefits owed. In FY 2019, 1,782 plans, covering approximately 300,000 participants, filed standard terminations. This number has increased, possibly due to rising interest rates reducing the cost of settling plan benefits. The number of large plans that filed standard terminations increased significantly.

In FY 2019, approximately 1,500 plans with more than 176,000 participants combined, completed standard terminations. Some of the larger standard terminations were: Rocky Flats Retirement Plan, AutoZone Inc. Associates' Pension Plan, and The Sherwin-Williams Company Salaried Employees Pension Plan.

In FY 2019, PBGC also conducted 355 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 \$5.1 million in additional benefits were distributed to 993 people in these plans.

Significant Litigation

PBGC protects participants in America's private-sector pensions through litigation in federal and state courts. In FY 2019:

- PBGC successfully opposed Supreme Court review of the D.C. Circuit's favorable opinion in *Lewis v. PBGC*. The D.C. Circuit held that under the terms of ERISA, any increase in asset value after plan termination belongs to PBGC, thus rejecting a fiduciary breach claim brought by 1,700 former Delta Pilots to recover PBGC's post-termination gains on plan assets.
- After lengthy litigation concerning the termination of the Delphi Salaried Plan, the U.S. District Court (E.D.Mich.) upheld PBGC's actions in *Black v. PBGC*. The Court ruled in PBGC's favor holding that: PBGC acted in accordance with ERISA when it executed an agreement with Delphi to terminate the Salaried Plan; PBGC's termination decision did not involve a fiduciary obligation to Delphi Salaried participants; termination of the Salaried Plan did not deprive plaintiffs of due process; and Delphi Salaried participants failed to demonstrate that termination of the Salaried Plan was arbitrary and capricious.

In PBGC v. Mizrachi, a fiduciary breach case brought by PBGC against former plan trustees, the U.S.
District Court (E.D. N.Y.) affirmed PBGC's interpretation of a statute of limitations under ERISA,
holding that PBGC had three years from the date it became trustee, plus any time permitted under a
tolling agreement, to bring an action, regardless of whether the alleged fiduciary breach occurred
decades earlier.

Plans Saved

When plan sponsors enter bankruptcy proceedings, PBGC encourages the continuation of pension plans where possible. Although bankruptcy requires plan sponsors and creditors to make tough choices, pensions are not always terminated. In FY 2019, three companies emerged from bankruptcy with their pension plans ongoing, protecting the benefits of participants: Hexion Inc. (approximately 8,000 participants); Westmoreland Coal Company (approximately 2,350 participants); and Nine West Holdings, Inc. (approximately 1,600 participants).

Coverage Pilot Program

In connection with a streamlined and simplified coverage determination process, PBGC initiated a one-year pilot program that allows, in limited circumstances, employers to request an Opinion Letter about whether a plan in the process of being created is likely to be covered by PBGC.

Mediation Program

PBGC initiated the Mediation Pilot Program in FY 2018. The program offered mediation to plan sponsors to facilitate resolution of negotiations in two key PBGC program areas: (1) ongoing plan sponsors as part of its Early Warning and Risk Mitigation Program; and, (2) former plan sponsors as part of resolving their pension liabilities following termination of underfunded pension plans. In FY 2019, PBGC made the Mediation Program permanent and added fiduciary breach cases to the categories of disputes covered. These cases involve situations where plan fiduciaries, such as a plan sponsor, plan administrators, and certain advisors, take actions that violate their fiduciary obligations to participants.

It is PBGC's practice to resolve Early Warning issues, termination liability claims, and fiduciary breach cases on a consensual basis with plan sponsors without the need for litigation. Mediation gives plan administrators the opportunity to resolve these cases with a neutral, professional, independent mediator in a timely and cost-effective manner.

GOAL NO. 2: PAYING TIMELY AND ACCURATE BENEFITS

Through its Single-Employer Program, PBGC is directly responsible for the benefits of about 1.5 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 trustee of single-employer plans that end without enough money to pay all their benefit promises. In FY 2019, PBGC took responsibility for 51 single-employer plans that provide the pension benefits to more than 103,000 current and future retirees.

When PBGC assumes responsibility for a pension plan, the top priority is to make sure the plan's existing retirees continue to receive benefits without interruption. In FY 2019, PBGC's Office of Benefits Administration (OBA) oversaw the seamless transition of more than 15,000 retirees to direct payments from PBGC.

The Corporation paid over \$6 billion in benefits to more than 932,000 retirees in single-employer plans and nearly 33,000 new retirees applied for benefits. Additionally, PBGC processed more than 90 percent of those applications in 45 days or less, exceeding its performance target of 87 percent for FY 2019.

After PBGC becomes trustee of a plan, OBA begins a complex, multiyear process of valuing the plan's assets, reviewing plan and participant data, and calculating final benefits. Accuracy of benefit amounts is a priority. When participants are eligible and request to start receiving their benefit, PBGC begins paying them an estimated benefit if the Corporation has not completed the process required to issue a final benefit determination. When the process is complete, participants are informed of their exact benefit amount. In FY 2019, more than 96 percent of final benefit amounts issued were within 10 percent of the estimated benefit amount, exceeding the performance target of 95 percent.

In recent years, PBGC has focused on calculating final benefits in its largest and most complex plans while improving work products and processes in response to recommendations by the Office of Inspector General. As a result, OBA reduced processing times by more than 8 percent, from 6.11 years in FY 2018 to 5.60 years in FY 2019. OBA expects to continue this reduction in processing times in FY 2020.

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. Employers and 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 2019 with 84 open appeals. The Appeals Board accepted 228 new appeals and closed 221 appeals, with 91 still open at the end of the fiscal 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 continuously 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 surveys to help improve the coordination and cooperation essential to meeting customer service goals.

Each quarter, PBGC leadership participates in data-driven discussions covering the Corporation's progress in operations, stewardship and accountability, customer satisfaction, and building and maintaining a model

¹ https://www.pbgc.gov/open/index

workplace. The strategic use of performance data better informs planning and execution of operations, as well as corporate and program area decision-making.

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. In addition, the Corporation is funded by 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.

Financial Position

The financial status of the Single-Employer Program shows continuous improvement and maintained a positive net position at the end of FY 2019. Estimates from PBGC's FY 2018 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 Program deteriorated during FY 2019 to \$65.2 billion, a record negative net position. Absent changes in law, the Multiemployer Program is likely to run out of money during FY 2025.

Financial Soundness and Financial Integrity

The Corporation protects the pensions of over 35 million people whose plan benefits are valued in excess of \$3 trillion. PBGC's two insurance programs – one for single-employer plans and one for multiemployer plans – are designed to protect participants' pension benefits when plans fail. The programs differ significantly in the extent to which plan benefits are funded and the level of PBGC's guarantee.

In addition to collecting premiums, PBGC exercises care in the management of approximately \$131 billion in total assets. This year, PBGC attained the 27th consecutive unmodified audit opinion on its financial statements.

Collecting Premiums

Premium rates are set by Congress and generally indexed for inflation. The Bipartisan Budget Act of 2013, MPRA, and the Bipartisan Budget Act of 2015 specify premium rates or premium increases for certain years. In FY 2019, combined premium cash receipts collected totaled \$5.8 billion. Single-Employer Program premium cash receipts collected were \$5.5 billion. Separately, Multiemployer Program premium cash receipts were around \$296 million. In FY 2019, PBGC further improved the collection process by automating its systems to mail acknowledgments and the results of processing for every premium filing received daily. In addition, an automatic email notification is now sent to plan practitioners when an actionable notice is mailed. As a result, more plan practitioners responded to collection notices sooner, which reduced the average response time and decreased the amount of potential late premium penalties.

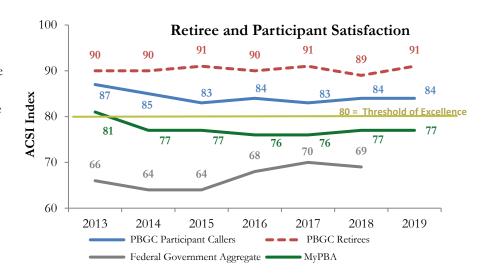
Investing Prudently

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. For more information, refer to Section VII Investment Activities.

OUTREACH AND CUSTOMER SERVICE

Customers are the core of PBGC's mission. To provide the highest level of customer service, PBGC uses surveys to listen to its customers, track satisfaction, and identify opportunities for improvement. Scores are based on the widely recognized American Customer Satisfaction Index (ACSI).

Participant and Retirees
Retirees receiving monthly
payments from PBGC gave
the Corporation a
satisfaction score of 91; the
FY 2019 ASCI target score
was 90. Retirees continue
to be PBGC's most
satisfied customer group
with scores consistently
among the highest in
government.



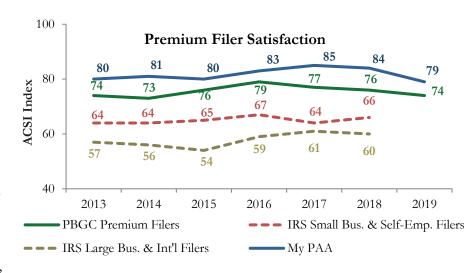
Pension plan participants

who called PBGC and responded to a survey scored their satisfaction at 84, equal to last year and slightly below the target. While PBGC continues to provide excellent customer service to its callers, many survey respondents note the lack of instant online benefit estimates as the main reason for dissatisfaction.

My Pension Benefit Account (MyPBA) is an online application that allows participants in PBGC-trusteed plans to request estimates, apply for benefits, change address or tax information, and more. MyPBA's FY 2019 score was 77, at target and the same as FY 2018. In order to protect customers from identity theft and financial loss, MyPBA strengthened security requirements in FY 2018. The stricter rules for passwords and sign-in frequency have, unfortunately, frustrated some customers. MyPBA garnered very strong scores around the application's look and feel, as well as its use of plain language.

Premium Filers

Pension plan sponsors and their practitioners who file premiums with PBGC gave an FY 2019 satisfaction score of 74, achieving the target of 74 and comparing very well to similar functions, such as IRS small-business and self-employed tax filers (66) and large-business and international tax filers (60). Filers give excellent scores to PBGC's personal service,



written communication, and filing process.

My Pension Administration Account (My PAA) is an online application through which pension plan practitioners file premium information and payments with PBGC. The FY 2019 score was 79, versus a target of 80. Customers gave excellent scores to the content and site performance of My PAA.

In FY 2019, My PAA implemented a few key functional enhancements, all based on actual practitioner feedback. My PAA introduced the concept of "bulk actions," which allow users to invite and remove practitioners from multiple plans at once, in addition to viewing the premium account history for more than one plan at a time. Also, building upon the well-received *Plan Correspondence Quick Link* implemented last year, My PAA created automated email notifications to all filing team members whenever actionable PBGC correspondence is mailed to the plan administrator, as many practitioners were unaware when a new item had appeared on the website. In addition, My PAA enhanced the *Check Status of Request Quick Link* by providing more detail as to the exact type of request submitted, reducing confusion within the filing team. Finally, to better align My PAA with information technology industry standards, other infrastructure and security upgrades were completed throughout the year.

Engaging With Customers and Stakeholders

PBGC.gov is the face of the Corporation to plan sponsors, practitioners, beneficiaries, workers, and retirees. PBGC works to continually improve the site's navigation, security, search, and overall usability.

In order to provide customers with a seamless online experience, PBGC considers visitor needs, including visitors who conduct transactions with PBGC using MyPBA, My PAA, and the e-filing tool. The website uses plain language and receives positive reviews from site visitors.

The Corporation distributes email notifications to customers and stakeholders on a variety of topics such as regulatory updates and other announcements. In FY 2019, 81 emails were sent to over 198,000 practitioners, workers, retirees, and other stakeholders. On average, recipients open these emails about 20 percent of the time, which is an extremely high rate when compared to private-sector email engagements.

PBGC also uses social media to reach its customers in the digital environment to engage with the pension community and share important updates broadly and in real-time. In FY 2019, the Corporation's social media presence continued to grow and saw a 26 percent increase in total followers on Facebook, Twitter, and LinkedIn.

A large portion of outreach efforts are focused on the pension community, including employer and participant groups. In FY 2019, PBGC representatives attended 145 events, sharing their expertise on matters regarding the future insolvency of the Multiemployer Program, regulatory information, and the Missing Participants Program.

SUSTAINING THE PROGRAMS

PBGC continuously 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 Policy, Research, and Analysis Department (PRAD) delivers projections and analysis of the Corporation's programs and policy alternatives to lawmakers, policy makers, and external stakeholders.

Each year, PRAD updates the Pension Insurance Data Book, a collection of data regarding PBGC and its Single-Employer and Multiemployer Programs. The data tables include statistics for PBGC's Single-Employer and Multiemployer Programs and for the private defined benefit pension system.

In addition, PBGC continues to study key retirement issues. Recently completed and ongoing analysis relate to Single-Employer Program guaranteed benefits, multiemployer plan participants, and risk-transfer activity.

Improvements to the Pension Insurance Modeling System and Related Reports

PRAD's primary forecasting model is the Pension Insurance Modeling System (PIMS). In FY 2019, 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.

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, independent reviews were performed to evaluate how PIMS models bankruptcy as it relates to single-employer and multiemployer sponsor participation and the potential for contagion in the Multiemployer Program.

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.

Enterprise Risk Management

During FY 2019, the Corporation continued to implement its risk management framework, and an agency-wide risk assessment was completed. The Corporation's top three risks were:

- The projected multiemployer fund insolvency.
- The possibility of data loss and the misuse of personally identifiable information.
- The planning uncertainty connected with the enactment of laws that result in new or changing program requirements, or uncertainty caused by a large influx of plans and participants.

Each of these risks could severely impact delivery of PBGC's mission. The Corporation continuously monitors the risks and the associated mitigation strategies.

Other significant milestones include:

- Development of an Enterprise Risk Management (ERM) maturity model, which was used to measure the maturity of PBGC's ERM program.
- Completion and dissemination of ERM commonly used terms to PBGC's workforce.
- Integration of ERM principles into key decision-making processes, such as strategic planning, organizational performance, and budgeting to help foster a risk-aware culture.

Regulatory and other Guidance Activities

PBGC continues to issue regulations to protect plan participants and minimize burdens on pension plans and plan sponsors. In FY 2019, PBGC published:

- A final rule that simplifies certain reporting and disclosures of plan information by terminated and/or insolvent multiemployer plans to PBGC and to participants and beneficiaries. The final rule also requires plan sponsors of terminated and/or insolvent plans to file their withdrawal liability information with PBGC so that PBGC can more precisely measure its Multiemployer Program liabilities.
- A proposed rule that would implement statutory changes under MPRA affecting the determination of a withdrawing employer's liability under a multiemployer plan and annual withdrawal liability payment amount.
- A proposed rule that would make clarifications, corrections, and improvements to four of PBGC's existing regulations.

Through other guidance, PBGC also:

- Streamlined and simplified the coverage determination process by providing a new form and instructions for requesting a determination about whether a plan is covered under Title IV of ERISA.
- Conducted a thorough review of PBGC's webpages addressing substantial cessation of operations under section 4062(e) of ERISA and revamped the webpages to streamline information and provide answers to frequently asked questions.

Created a new form series to clarify and simplify the process for providing PBGC the required
notifications following a substantial cessation of operations and election to make additional annual
contributions to satisfy the resulting liability.

In FY 2019, PBGC also published:

- A final rule to conform our regulations to changes in the phase-in rules for owner-participants under the Pension Protection Act of 2006.
- A proposed rule that would make clarifications and promulgate policies in PBGC's benefit payments and valuation regulations.
- A proposed rule that would update the interest and mortality assumptions used to determine lump sum amounts under PBGC's benefit payments regulation.
- A solicitation for nominations for appointment to PBGC's advisory committee.

STRENGTHENING A DIVERSE WORKFORCE AND LEADERSHIP

PBGC continues to be committed to maintaining a diverse and inclusive workplace while also promoting a performance-based culture. In FY 2019, the Corporation continued to focus on strengthening employee performance, increasing leadership engagement, expanding health and wellness programs, and continued efforts to recruit and retain disabled veterans.

The Partnership for Public Service ranked PBGC in the top five best places to work among small federal agencies. The Corporation ranked fifth out of the 29 agencies in this category.

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 2019, 69 percent of PBGC's federal employees participated in the survey. This is an increase from the FY 2018 participation rate of 60 percent and is significantly higher than the 2019 government-wide participation rate of 43 percent.

According to the survey results, PBGC has an engaged workforce. 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.

Recruitment and Outreach

PBGC continues to promote recruitment and retention of disabled veterans via corporate and leadership training programs and recruitment efforts, including job fairs and special outreach recruiting events to universities, colleges, and disabled veteran organizations.

In FY 2019, PBGC hired disabled veterans at a 3.2 percent hiring rate. Of the disabled veterans already on staff, 82 percent have remained with PBGC for over two years; 65 percent for three years; and 51 percent for more than four years.

PBGC continues to reach out to veterans on social media such as LinkedIn and Facebook, as well as partnering with Military/Recruit, Wounded Warriors, Disabled Veterans of America, and area colleges/universities to share the Corporation's efforts to hire disabled veterans.

Diversity and Inclusion

The PBGC Diversity & Inclusion Council, which includes employees, affinity groups, and representatives from management and the union, developed and piloted a training for supervisors titled "Be an Inclusion Agent." The training promoted strategies that created a supportive, welcoming, and collaborative work environment. The Council also partnered with agency stakeholders to launch a new event called, "PBGC Tech U," where employees were provided opportunities to learn how to make electronic information more accessible to people of all abilities.

The Council sponsored its fourth annual 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.

OEEO's Affirmative Employment Program (AEP) promotes equal employment opportunity by identifying discriminatory employment practices and policies that impede progress for all workforce demographics. The AEP presented events to support the continued development of a model EEO program. More notable events and activities include:

- Created and implemented YOUniversity, PBGC's bias awareness program.
- Continued to implement PBGC's Education & Enrichment Book Club to promote discussions around diversity in the workplace.
- Presented various Equal Employment Opportunity trainings concerning harassment prevention in the workplace.

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

SAFEGUARDING CUSTOMERS' INTERESTS

Participant and Plan Sponsor Advocate

The PBGC Participant and Plan Sponsor Advocate (The Advocate) is an independent entity within PBGC. The Advocate is selected by PBGC's Board of Directors (the Board) and reports to the Board 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 dealing 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, the Board, and PBGC's director.

The Advocate's annual report, issued on December 31, 2018, recognized PBGC for handling large volumes of routine transactions exceptionally well. The report notes that the Corporation made positive improvements, such as consolidating potentially omitted participants claims, and holding regular meetings with participant advocacy groups and stakeholders. The report also noted the continued success of PBGC's Missing Participants Program and interagency initiatives. While these changes have a positive effect on PBGC's interactions with participants and plan sponsors, the Advocate recommended the Corporation focus on initiatives that enhance the customer's experience, whether PBGC's written communications or any subsequent interactions staff may have with participants or their advisors.

Strengthening E-Government and Information Technology

PBGC's Office of Information Technology (OIT) continues to deliver on its strategic goals and objectives as described in the PBGC Information Technology (IT) Strategic Plan. OIT achieved a 100 percent response rate for quarterly/annual Federal Information Security Management Act (FISMA) submissions to OMB and Congress for FY 2018, during the FY 2019 Reporting Period. OIT also achieved compliance for multiple OMB requirements, and the Cybersecurity Operations Maturation Plan. Additionally, OIT implemented the Enterprise Common Controls (ECC) Program enabling PBGC to leverage trusted cybersecurity protections through reuse of IT Security & Privacy controls. Lastly, OIT designed and implemented an executive cybersecurity performance dashboard for ECC and security vulnerabilities.

Additional OIT accomplishments include:

- Developed FISMA system level detailed vulnerability dashboards and reports to support PBGC's information security continuous monitoring strategy.
- Modernized the Corporation's platform for requesting access to applications and equipment by
 migrating to a Cloud-based platform with an extensible framework. This improved integration with
 other IT service management functions and improved user experience.

Completed initial activities for establishing a cross-discipline Insider Threat Program (ITP). Activities
include designating a senior agency official and program officers, establishing a program System of
Records Notice, and drafting an ITP directive.

Ensuring Ethical Practices

In FY 2019, PBGC continued to ensure that all 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 post-employment rules and activities. In FY 2019, the ethics team implemented a new format for annual ethics training, with 100 percent of the Corporation's senior level officials and 96 percent of confidential disclosure filers, including Advisory Committee members.

The ethics team continued its "Ethics in Brief" email notices to all PBGC employees on various topics of interest, including engaging in outside teaching, speaking, and writing activities, and restrictions related to the Hatch Act of 1939.

Protecting Privacy Interests

Among PBGC's highest priorities is protecting the personal information of its participants, beneficiaries, employees, and contractors. In FY 2019, the Privacy Office continued PBGC's transition from a compliance approach to a more risk-based approach to privacy, allowing PBGC to allocate resources appropriately. This included reviewing PBGC's systems and processes to optimize the confidentiality, integrity, and availability of the information PBGC maintains.

Raising awareness reduces overall risk by addressing the elements of breaches and security incidents. In FY 2019, PBGC updated the Information Security and Privacy Awareness course for new hires and annual refresher training for current employees and contractors. The Privacy Office also expanded its role-based training on handling personally identifiable information and conducted its annual inventory of personally identifiable information holdings to reduce the use of Social Security numbers.

Strengthening Transparency & Disclosure

PBGC continues to strengthen and promote transparency. At PBGC, every employee is responsible for ensuring compliance with the Freedom of Information Act (FOIA). In FY 2019, PBGC held 34 conferences and training sessions on promoting transparency, collaboration, and compliance to ensure efficient and accurate processing of FOIA requests.

PBGC ended FY 2019 with a zero backlog of FOIA requests. Additionally, the Corporation received the highest possible rating from the Department of Justice for efforts in improving FOIA administration in five key areas: applying a presumption of openness; having an efficient system in place for responding to requests; increasing proactive disclosures; utilizing technology; and reducing any backlogs/improving timeliness during FY 2018.

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 (OIG)

PBGC places a strong emphasis on diligently addressing the OIG's 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 2019, PBGC closed 28 audit recommendations, including six related to the three significant deficiencies. Also, during FY 2019, PBGC received 46 new audit recommendations, resulting in 84 open at the end of FY 2019. This results in a substantial reduction from 180 in FY 2015.

PBGC's OIG oversaw the annual financial statement audit completed by an independent public accounting firm, CliftonLarsonAllen LLP. In addition, during FY 2019, the OIG performed other audits and evaluations, including the following:

- Audit of the Pension Benefit Guaranty Corporation's Fiscal Year 2018 and 2017 Financial Statements (AUD-2019-1/FA-18-127-1), issued November 15, 2018. In this report, the OIG stated 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. PBGC management is fully committed to working with the OIG and addressing identified weaknesses in a timely manner. In the report, the OIG identified the following three significant deficiencies:
 - o Controls over the Present Value of Future Benefit Liability.
 - o Present Value of Nonrecoverable Future Financial Assistance.
 - o Access Controls and Configuration Management.
- PBGC's Fiscal Year 2018 Compliance with the Improper Payments Elimination and Recovery Act (EVAL-2019-10/PA-19-133), issued April 11, 2019. As required by the Improper Payments Information Act (IPIA) of 2002, the OIG reviewed PBGC's compliance with improper payment requirements. For FY 2018, Benefit Payments and Premium Refunds were reviewed and it was determined that both payment streams were not susceptible to significant improper payments. The OIG determined that PBGC was compliant with the applicable improper payment reporting requirements.
- Audit of PBGC's Use of the Women-Owned Small Business Contracting Program (AUD-2019-11/PA-18-130), issued July 2, 2019. The OIG concluded that PBGC complied with the Small Business

Act requirement of appointing an Office of Small and Disadvantaged Business Utilization (OSDBU) director. However, the Corporation has not complied with the requirements for aligning the OSDBU director within the reporting hierarchy of the Corporation. Furthermore, the OSDBU director has not provided training to contracting officers for the various small business programs. As a result, firms in Small Business Administration's contracting assistance programs may not be receiving federal contract opportunities through exclusive set-aside and sole-source contracts meant to ensure small businesses receive a fair share of federal contracting dollars. As a result of this review, the OIG made two recommendations to the Corporation and corrective actions are ongoing.

- Evaluation of PBGC's Data Protection at Contractor-Operated Facilities (EVAL-2019-08/PA-18-125), issued January 31, 2019. The OIG found that controls relating to data protection are suitably designed to protect sensitive information at contractor operated PBGC facilities. At the same time, PBGC has opportunities to improve the operational effectiveness of some of these controls. The OIG found controls relating to monitoring of the personnel security process and oversight by Contracting Officer's Representatives (CORs) are not consistently executed in a manner to ensure the protection of sensitive information. The OIG identified vulnerabilities in the employee separation process that require additional controls. The OIG made eight recommendations to management to improve monitoring and management oversight of the personnel security process, the COR oversight function at contractor-operated facilities, and controls over the employee separation process. Corrective actions are ongoing.
- Inspection of PBGC's Telework Program (Report No.IN-2019-12/Project No.IN-19-131), issued July 30, 2019. The OIG found PBGC has established internal controls over the telework program and administers the program consistent with statutory and regulatory requirements. However, PBGC has opportunities to improve the effectiveness of its internal controls; specifically, performance of telework timekeeping responsibility needs improvement, telework information should be accurately reported to OPM, and the effectiveness of the telework program must be assessed. The OIG made four recommendations in the report and corrective actions are ongoing.

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

Government Accountability Office (GAO)

GAO's latest high-risk report dated March 2019 continued to include PBGC's Single-Employer and Multiemployer Programs as one of 35 government programs most at risk due to vulnerabilities. The report underscores the risk of PBGC's Multiemployer Program being exhausted within six years because of projected pension plans' insolvencies.

PBGC also monitors progress in addressing GAO recommendations. As of September 30, 2019, PBGC had only two open GAO recommendations. One relates to a multiagency effort to revise the Form 5500 and the other relates to FOIA. The Corporation has addressed the FOIA open recommendation and will work with GAO to seek closure.

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



FISCAL YEAR 2019 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 over 35 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 decreased by \$5,073 million, increasing the Corporation's combined negative net position (deficit) to \$56,510 million as of September 30, 2019, from \$51,437 million as of September 30, 2018. PBGC includes combined memorandum totals for its two independent insurance programs solely for an entity-wide informational view of its financial statements. Most importantly, the Single-Employer and Multiemployer Programs are separate by law; and, therefore, PBGC is required to report the financial results of operations separately. Results from operations from the Multiemployer Program contributed to the decrease, offset by an improvement in the Single-Employer Program. The decrease in the combined net position is largely due to \$12,567 million in charges due to change in interest factors, \$11,662 million in multiemployer losses from insolvent and probable plans, and \$3,024 million charge due to expected interest, offset by \$15,262 million in investment income and \$6,709 million in premium and other income. Combined actuarial charges totaled \$14,749 million. PBGC uses a curve of one-year forward rates (see Note 6). The curve of one-year forward rates (interest factors) for September 30, 2019, starts with an interest factor of 2.36% in year 1 and varies annually for each year thereafter until year 31 when the factor becomes 1.98% for the remaining years. The overall FY 2019 impact from the decrease in interest factors resulted in \$23,196 million in charges that consists of a \$12,270 million charge for terminated single-employer plans, a \$10,629 million charge for multiemployer probable plans, and a \$297 million charge for insolvent multiemployer plans.

Multiemployer Financial Position

• The Multiemployer Program's net position declined by \$11,290 million, resulting in a negative net position of \$65,166 million as of September 30, 2019, a record deficit. It is important to note that the Multiemployer Program's total assets had a modest increase from FY 2018 to FY 2019 year-end, so nearly the entire \$11,290 million decline in the FY 2019 Multiemployer net position is the result of the program's total liabilities increasing from \$56,187 million in FY 2018 to \$68,024 million at FY 2019 year-end.

PBGC's FY 2018 Projections Report shows that the Multiemployer Program continues to show a very high likelihood of insolvency during FY 2025, and that insolvency is a near certainty by the end of FY 2026. 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 \$11,290 million increase in the Multiemployer Program's deficit is primarily due to the change in interest factors, which resulted from decreases in market interest rates, actuarial charges related to expected interest on benefit liability, and the addition of new plans added to the multiemployer probable insolvency inventory during the fiscal year. Losses from financial assistance for insolvent and probable plans were \$11,662 million. The primary factors for this loss were losses resulting from the change in interest factors of \$10,629 million for identified multiemployer probable plans, charges from new probable plans of \$1,881 million, and charges due to expected interest on benefit liabilities of \$1,545 million, offset by deleted plans of \$1,355 million. Fifteen new plans with net claims of \$2,015 million were added to the multiemployer inventory (including 4 insolvent plans and 11 multiemployer probable plans). Charges for insolvent plans (i.e., plans currently receiving financial assistance) included \$297 million due to the change in interest factors and \$74 million charge due to expected interest on accrued liabilities, offset by \$31 million from actuarial adjustment credits. Other factors that contributed to the Multiemployer Program's net loss are \$40 million in administrative expenses, offset by \$442 million in investment gains and \$310 million in net premium income.

Single-Employer Financial Position

• The Single-Employer Program's FY 2019 net position improved by \$6,217 million, resulting in a positive net position of \$8,656 million as of September 30, 2019. The primary factors in the Single-Employer Program's FY 2019 net income of \$6,217 million included a gain of \$14,820 million in investment income, \$6,399 million in net premium and other income, and \$811 million in credits from actuarial adjustments. These favorable factors for the Single-Employer Program were offset by \$12,270 million in charges due to change in interest factors, which resulted from decreases in market interest rates, \$2,950 million in charges due to expected interest related to PBGC's liabilities as of September 30, 2018, \$502 million in administrative, investment, and other expenses, and \$91 million in losses from completed and probable terminations.

INVESTMENTS

- Global Public Stock U.S. equities recovered from the sharp decline in the first quarter of FY 2019 to
 end the year in positive territory, posting low single-digit returns. Developed non-U.S. equities and
 emerging market equities delivered slightly negative returns.
 - For FY 2019, global equity market returns generated \$61 million of investment income from equity investments compared to investment income of \$2,733 million for FY 2018 (2.49 percent return for Total Global Public Stock in FY 2019 versus 9.65 percent in FY 2018).
- Global Bonds The Treasury yield curve shifted down and flattened in FY 2019, with yields at the long end of the curve falling more than yields at the shorter end. Investment-grade bonds posted strong returns in FY 2019, outperforming equities. Both Government/Treasury bonds and corporate bonds delivered strong results. Long-duration bonds outperformed shorter-duration bonds. High-yield bonds and emerging market debt also posted positive returns.
 - For FY 2019, global fixed income generated a gain of \$14,792 million from fixed income investments compared to a loss of \$1,484 million for FY 2018. This reflects higher fixed income returns (19.98 percent return for Total Global Bonds in FY 2019 versus -2.17 percent in FY 2018).

• Combined Investment Return – FY 2019 investment returns contributed to a total PBGC combined investment gain of \$15,262 million. PBGC's Total Fund Composite (excluding transition accounts) earned 14.65 percent in FY 2019, exceeding the Total Fund Benchmark return of 14.37 percent.

OPERATIONS

- PBGC's combined single-employer benefit payments and multiemployer financial assistance were \$6,180 million in FY 2019 and \$5,945 million in FY 2018. PBGC assumed responsibility for the benefit payments of an additional 103,429 workers and retirees in the 51 single-employer plans that were trusteed during FY 2019.
- FY 2019 combined net premium income increased by \$852 million to \$6,662 million compared to FY 2018 net premium income of \$5,810 million. The primary components of the combined net premium income were variable rate premium (VRP) income of \$4,448 million, and flat rate premium income of \$2,194 million. Overall, this represented a 15 percent year-to-year increase in combined premium income and is largely due to (a) higher premium rates for both the flat and variable rate premiums, and (b) the plans' underfunding (i.e., higher reported unfunded vested benefits).
- During FY 2019, PBGC assumed financial responsibility for 47 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, \$1,354 million of net claims for these plans were already reflected in PBGC's FY 2018 results. These 47 terminated plans had an average funded ratio of about 66 percent, and these terminations resulted in an aggregate net loss to PBGC of \$1,554 million (see Note 12).
- As of September 30, 2019, there were no single-employer plans classified as a probable termination. Probable terminations represent PBGC's best estimate of claims for plans that are likely to terminate in a future year.
- As of September 30, 2019, the present value of multiemployer nonrecoverable future financial assistance of \$67,995 million consists of 85 insolvent plans (\$2,807 million), 65 terminated plans not yet insolvent but probable (\$1,955 million), and 41 ongoing plans that are projected to exhaust plan assets within 10 years and are classified as probable (\$63,233 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 \$154,673 million in FY 2019, a \$20,766 million decrease compared to \$175,439 million in FY 2018. This decrease is primarily due to the increase in the interest factors used for valuing liabilities (see Note 9 for unique discount factors utilized in calculating the reasonably possible estimate). In addition, there was a 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 increased to \$10,871 million in FY 2019, a \$1,461 million increase from the \$9,410 million in FY 2018. This increase is primarily due to the addition of six new plans (\$3,177 million net liability) classified as reasonably possible, less eight plans (\$2,163 million net liability) from the prior year that are no longer classified as reasonably possible (plans removed due to improvements in the plans' financial condition or reclassified to other categories).

KEY SINGLE-EMPLOYER AND MULTIEMPLOYER RESULTS

(Dollars in millions)		FY 2019		FY 2018
Instrument Assistan				
Insurance Activity SINGLE-EMPLOYER AND MULTIEMPLOYER				
PROGRAMS COMBINED				
Single-Employer Benefits Paid	¢	6,020	\$	5,792
Multiemployer Financial Assistance Paid	\$ \$	160	э \$	153
Retirees Receiving Benefits (at end of year)	φ	954,000	φ	924,000
Total Participants Receiving or Owed Benefits (at end of year)				
New Underfunded Terminations		1,555,000 47		1,480,000 74
Terminated/Trusteed Plans (combined to date)		4,975		4,929
Plans That Have Received Financial Assistance		4,975		78
Plans That have received philancial Assistance		65		/0
Summary of Operations				
SINGLE-EMPLOYER AND MULTIEMPLOYER				
PROGRAMS COMBINED				
Premium Income, Net	\$	6,662	\$	5,810
Losses (credits) From Completed and Probable Terminations	\$	91	\$	(322)
Losses (credits) From Financial Assistance	\$	11,662	\$	(10,830)
Investment Income	\$	15,262	\$	1,450
Actuarial Charges and Adjustments	\$	14,749	\$	(6,615)
,				,
Financial Position				
SINGLE-EMPLOYER AND MULTIEMPLOYER				
PROGRAMS COMBINED				
Total Assets	\$	130,926	\$	112,252
Total Liabilities	\$	187,436	\$	163,689
Net Income (Loss)	\$	(5,073)	\$	24,529
Net Position	\$	(56,510)	\$	(51,437)
SINGLE-EMPLOYER PROGRAM				
Total Assets	\$	128,068	\$	109,941
Total Liabilities	\$	119,412	\$	107,502
Net Income (Loss)	\$	6,217	\$	13,353
Net Position	\$	8,656	\$	2,439
MULTIEMPLOYER PROGRAM		6 0 7 0	*	2.24:
Total Assets	\$	2,858	\$	2,311
Total Liabilities	\$	68,024	\$	56,187
Net Income (Loss)	\$	(11,290)	\$	11,176
Net Position	\$	(65,166)	\$	(53,876)

The Single-Employer Program and Multiemployer Program are separate by law.

The "Single-Employer and Multiemployer Programs Combined" data totals presented above are solely an entity-wide informational view of the PBGC's two independent insurance programs.

FINANCIAL SUMMARY – SINGLE-EMPLOYER PROGRAM

	Fiscal Year Ended September 30,									
(Dollars in millions)	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Insurance Activity:										
Benefits paid	\$ 6,020	5,792	5,699	5,659	5,570	5,522	5,449	5,384	5,340	5,467
Participants receiving monthly benefits at end of year ¹	887,138	861,371	839,772	838,493	825,666	812,608	799,210	781,160	775,300	747,530
Plans trusteed and pending trusteeship by PBGC ²	4,965	4,919	4,845	4,769	4,706	4,640	4,557	4,446	4,292	4,140
Summary of Operations:										
Premium income, net	\$ 6,352	5,518	6,739	6,379	4,138	3,812	2,943	2,642	2,072	2,231
Other income	\$ 47	38	184	25	11	22	38	13	17	30
Investment income (loss)	\$ 14,820	1,502	5,363	8,648	324	6,439	2,741	8,792	3,446	7,594
Actuarial charges and adjustments (credits)	\$ 14,409	(6,468)	(950)	11,515	9,504	1,864	3,054	14,874	6,561	9,421
Losses (credits) from completed and probable termination	\$ 91	(322)	3,063	(417)	(780)	(115)	468	2,006	201	509
Administrative and investment expenses	\$ 488	489	481	465	446	464	434	443	424	449
Other expenses	\$ 14	6	26	4	30	17	5	-	21	(7)
Net income (loss)	\$ 6,217	13,353	9,666	3,485	(4,727)	8,043	1,761	(5,876)	(1,672)	(517)
Summary of Financial Position:										
Cash and investments ³	\$ 118,119	101,310	96,830	89,596	80,090	81,215	77,881	76,941	71,292	69,150
Total assets	\$ 128,068	109,941	106,196	97,342	85,735	88,013	83,227	82,973	78,960	77,463
Present value of future benefits	\$ 113,100	101,866	111,280	113,704	106,926	102,774	105,018	105,635	92,953	90,022
Net position	\$ 8,656	2,439	(10,914)	(20,580)	(24,065)	(19,338)	(27,381)	(29,142)	(23,266)	(21,594)

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).

These cumulative measures may differ due to plans that terminated in a prior year may have been removed from inventory in a subsequent year.

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

³ Cash and investments consists of Cash and cash equivalents, Total investments, and Receivables, net: Investment income.

FINANCIAL SUMMARY – MULTIEMPLOYER PROGRAM

Fiscal Year Ended September 30,											
(Dollars in millions)		2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Insurance Activity:											
Financial assistance paid	\$	160	153	141	113	103	97	89	95	115	97
Plans that have received financial assistance ¹		85	78	72	65	57	53	44	49	49	50
Summary of Operations:											
Premium income, net	\$	310	292	291	282	212	122	110	92	92	93
Other income	\$	-	-	-	-	-	-	-	-	-	-
Investment income (loss)	\$	442	(52)	(53)	143	68	75	(96)	91	148	183
Actuarial charges and adjustments (credits)	\$	340	(147)	(23)	167	135	95	41	164	99	-
Losses (credits) from insolvent and probable plans - financial assistance	\$	11,662	(10,830)	6,438	6,768	9,963	34,260	2,969	2,466	1,461	831
Administrative and investment expenses	\$	40	41	42	39	32	18	25	20	14	12
Net income (loss)	\$	(11,290)	11,176	(6,219)	(6,549)	(9,850)	(34,176)	(3,021)	(2,467)	(1,334)	(567)
Summary of Financial Position:											
Cash and investments ²	\$	2,676	2,137	2,080	2,037	1,768	1,701	1,715	1,804	1,725	1,613
Total assets	\$	2,858	2,311	2,262	2,204	1,924	1,769	1,719	1,807	1,739	1,628
Present value of future benefits	\$	-	-	-	-	-	-	-	1	1	1
Nonrecoverable future financial assistance, present value	\$	67,995	56,153	67,283	61,009	54,186	44,190	9,931	7,010	4,475	3,030
Net position	\$	(65,166)	(53,876)	(65,052)	(58,833)	(52,284)	(42,434)	(8,258)	(5,237)	(2,770)	(1,436)

¹ 89 plans received financial assistance in FY 2019, 85 are expected to continue to receive financial assistance. Previously in FY 2018, 81 plans received financial assistance and as of September 30, 2018, there were 78 plans expected to continue to receive financial assistance.

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

² Cash and investments consists of Cash and cash equivalents, Total investments, and Receivables, net: Investment income.

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 51, and the accompanying notes beginning on page 55.

II. FINANCIAL AND PROGRAM RISKS

As of September 30, 2019, the Single-Employer and Multiemployer Programs reported net positions of \$8,656 million and (\$65,166) million, respectively. The Single-Employer Program's net position improved by \$6,217 million, resulting in a positive net position of \$8,656 million. The Multiemployer Program's net position declined by \$11,290 million, to \$65,166 million (its largest negative net position to date). Notwithstanding this combined negative net position, the Corporation has \$128,068 million in single-employer assets and \$2,858 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. The FY 2018 Projections Report indicates that the Multiemployer Program continues to show a very high likelihood of insolvency during FY 2025, and that insolvency is a near certainty by the end of FY 2026. (Please refer to Section V. Overall Capital and Liquidity.)

In FY 2019, significant factors beyond PBGC's control, including the performance of financial markets, changes in interest rates, and the solvency of insured pension plans, continue to influence PBGC's underwriting income and investment gains or losses. PBGC's best estimate of FY 2020 premium receipts ranges between \$6,850 million and \$7,150 million. No reasonable estimates can be made for FY 2020 terminations, the 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 mitigate these risks. Unlike private insurers, the Corporation cannot decline insurance coverage, regardless of the potential risk posed by an insured plan. Private insurers can also adjust premiums in response to risk, while PBGC cannot. PBGC's premiums are set by statute and Congress must approve any changes in premium rates.

Claims against PBGC's insurance programs vary greatly from year to year. The termination or insolvency of a single large pension plan may result in a larger claim against the Corporation than the termination or insolvency of many smaller plans. Thus, future claims will continue to depend largely on the failures of large plans. Additionally, PBGC's risks are concentrated in certain industries. Finally, PBGC's financial condition is

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

The Bipartisan Budget Act of 2018 (Pub. L. 115-123) created the Joint Select Committee on Solvency of Multiemployer Pension Plans (Select Committee) to develop legislative recommendations designed to improve the solvency of multiemployer pension plans and PBGC. Under the statute creating the Select Committee, PBGC provided technical assistance to the Select Committee in carrying out its duties. At the Select Committee's request, PBGC detailed three multiemployer pension experts to the Select Committee. The Select Committee did not issue legislative recommendations before the statutory deadline of November 30, 2018. By law, the Select Committee ceased to exist on December 31, 2018.

REGULATORY REVIEW AND REFORM

In FY 2019, PBGC's regulatory priorities focused on reviewing its current regulations and reducing burdens on pension plans and plan sponsors.

PBGC undertook a review of its multiemployer plan regulations and identified rules in which it can reduce burden and clarify guidance. In FY 2019, PBGC published a final rule that reduced the requirements to report and disclose plan information by terminated and/or insolvent multiemployer plans to PBGC and to participants and beneficiaries. PBGC also published a proposed rule that would implement statutory changes under MPRA affecting the calculation of withdrawal liability for multiemployer plans.

As part of its review of its single-employer plan regulations, in FY 2019, PBGC published several proposed rules to eliminate outdated provisions and make other improvements. For example, PBGC published a proposed rule to make miscellaneous technical corrections, clarifications, and improvements to its reportable events regulation, its annual financial and actuarial information reporting regulation, and to its premium rates and standard termination regulations. In addition, PBGC published two proposed rules to amend its benefit payments regulation, including a proposed rule to update the interest and mortality assumptions used by PBGC to determine lump sum payment amounts.

In addition, PBGC also issued in FY 2019:

- A final rule to conform our regulations to changes in the phase-in rules for owner-participants under the Pension Protection Act of 2006.
- A notice for a new system of records, "PBGC Insider Threat and Data Loss Prevention," and an
 interim final rule providing an exemption for the system of records in PBGC's Privacy Act
 regulation.
- A new form and instructions for requesting a determination about whether a plan is covered under Title IV of ERISA.

A new form series to clarify and simplify the process for providing PBGC the required notifications
following a substantial cessation of operations and election to make additional annual contributions
to satisfy the resulting liability.

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 guaranteed by law.

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 51-54, 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 24.7 million people (excluding those in plans that PBGC has trusteed), down from the 26.2 million people PBGC covered in FY 2018. The number of covered ongoing plans at the end of FY 2019 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 ensuing 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 2020 will be 3.7 percent higher than the limits that applied for 2019 as shown below for sample ages:

MAXIMUM GUARANTEED ANNUAL BENEFIT PAYABLE AS A SINGLE LIFE ANNUITY

Age	Plans Terminating in 2019	Plans Terminating in 2020
70	\$111,710	\$115,785
65	\$67,295	\$69,750
60	\$43,742	\$45,338
55	\$30,283	\$31,388

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) and the participant's age at the earlier of the plan termination date (the date the sponsor entered bankruptcy, if earlier) and the date the participant begins collecting benefits.

Net income for the Single-Employer Program was \$6,217 million in FY 2019. The primary drivers of this income included: investment income of \$14,820 million, net premium income and other income of \$6,399 million, and credits from actuarial adjustments of \$811 million. This was offset by charges of \$12,270 million due to an decrease in interest factors (which has the effect of increasing benefit liabilities and actuarial charges), \$2,950 million in actuarial charges due to expected interest on accrued liabilities, \$379 million in administrative and other expenses, \$123 million in investment expenses, and \$91 million in losses from completed and probable terminations.

PBGC's FY 2019 Single-Employer Program realized net income of \$6,217 million compared to FY 2018 net income of \$13,353 million. This unfavorable \$7,136 million year-over-year change was primarily attributable to:

- (1) an increase in actuarial charges due to change in interest factors of \$19,878 million,
- (2) an increase in actuarial charges due to expected interest of \$1,282 million,
- (3) an increase in losses from completed and probable terminations of \$413 million (see "Single-Employer Underwriting Activity" below),
- (4) an increase in administrative, investment, and other expenses of \$7 million,
- (5) an increase in investment income of \$13,318 million (a gain of \$14,820 million in FY 2019 compared to a gain of \$1,502 million in FY 2018),
- (6) an increase in net premium and other income of \$843 million, and
- (7) an increase in actuarial adjustment credits of \$283 million.

Actuarial charges and adjustments arise from changes in 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 \$6,740 million in FY 2019, \$706 million more than the FY 2018 gain of \$6,034 million. This \$706 million increase from the previous year was primarily due to the \$843 million increase in single-employer net premium and other income and a \$283 million favorable change in actuarial adjustment credits, offset by the \$413 million decrease in credits from completed and probable terminations and a \$7 million increase in administrative and other expenses.

Premium and other income from underwriting activity increased (from \$5,556 million in FY 2018 to \$6,399 million in FY 2019), largely due to an increase in net premium income from plan sponsors (from \$5,518 million in FY 2018 to \$6,352 million in FY 2019). The 15 percent increase in net premium income was largely due to (a) higher premium rates for both the flat and variable rate premiums, and (b) the plans' underfunding (i.e., higher reported unfunded vested benefits). Other income, consisting of interest on recoveries from sponsors, increased from \$38 million in FY 2018 to \$47 million in FY 2019.

Annual variable rate premium (VRP) income, paid by underfunded single-employer plans, increased by \$786 million to a total of \$4,488 million. The prior year's VRP rate of \$38 per \$1,000 of underfunding (capped at \$523 per participant) increased to \$43 per \$1,000 of underfunding (capped at \$541 per participant) for plan years beginning in 2019. Annual flat rate premiums for the Single-Employer Program increased from \$74 to \$80 per participant for plan years beginning in 2019, contributing to a \$78 million increase in flat rate premium income to a total of \$1,882 million in FY 2019.

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 U.S. Department of Treasury (U.S. 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 "Losses (credits) from completed and probable plan terminations" decreased from a credit of \$322 million in FY 2018 to a loss of \$91 million in FY 2019. The \$91 million loss is due to \$1,554 million in charges related to new plan terminations, offset by a \$1,344 million credit from probable claims and a \$119 million credit from revaluations of plans that had terminated in prior years, (see "Losses (credits) from Completed and Probable Terminations – Single-Employer Program" table in Note 12).

The net claim for single-employer probable terminations as of September 30, 2019, was \$173 million, while the net claim as of September 30, 2018, was \$1,799 million. This \$1,626 million decrease is due to the

termination of two related probable plans with a net claim of \$1,636 million, offset by an increase in the reserve for small unidentified probables of \$10 million (see Note 6).

Single-employer administrative expenses decreased by \$1 million from \$366 million in FY 2018 to \$365 million in FY 2019.

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

- \$112,814 million trusteed plans (4,929 plans),
- \$96 million plans pending termination and trusteeship (36 plans),
- \$173 million reserve for small single-employer unidentified plans (there were no specifically identified single-employer probable plans at September 30, 2019), and
- During FY 2019, PBGC terminated 47 underfunded single-employer plans with a net claim of \$1,554 million, with \$1,354 million already accrued as probable.

SINGLE-EMPLOYER FINANCIAL ACTIVITY

Single-employer financial activity reflected a loss of \$523 million in FY 2019. This is due to \$15,220 million in actuarial charges (\$15,220 million charge in FY 2019 compared with a credit of \$5,940 million in FY 2018), offset by \$14,820 million in investment income (\$14,820 million in FY 2019 compared with \$1,502 million in FY 2018), and \$123 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. An actuarial charge of \$12,270 million due to the change in interest factors occurred in FY 2019 due to a decrease in the interest factors from FY 2018.

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 2019 (2.95%) increased compared to the factor at the beginning of FY 2018 (1.54%). The Single-Employer Program's expected interest charges increased in FY 2019 (from \$1,668 million in FY 2018 to \$2,950 million in FY 2019).

PBGC's single-employer Total Present Value of Future Benefits (PVFB) increased from \$101,866 million at September 30, 2018, to \$113,100 million at September 30, 2019.

Components of PBGC's single-employer PVFB of \$113,100 million are as follows:

• Trusteed plans - \$112,814 million

- Plans pending termination and trusteeship \$96 million
- Settlements and judgements \$17 million
- Claims for probable terminations \$173 million

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 forward rates (interest factors). The curve of one-year forward rates (interest factors) for September 30, 2019, starts with an interest factor of 2.36% in year 1 and varies annually for each year thereafter until year 31 when the factor becomes 1.98% for the remaining years. The curve of one-year forward 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.

To determine future mortality rates, PBGC used the same mortality table and updated the generational projection scale from MP-2017 used for September 30, 2018 to MP-2018 used for September 30, 2019. The impact to PVFB from this mortality assumption change 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 10.8 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 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.

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 (see Note 6).

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 total contributions made to the plan. 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 (only once to date), and for that reason they 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 percent 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 percent 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 30 years of service, PBGC's guarantee would cover 100 percent of annual amounts up to \$3,960 and partially cover amounts in excess of that not to exceed a total of \$12,870 per year. The multiemployer guarantee limit has been in place since 2001.

As shown in the Statements of Financial Position on page 52, 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 become insolvent (for the current year), as well as ongoing plans that are expected to exhaust plan assets and require financial assistance within the next 10 years.

During FY 2019, PBGC's obligations for future financial assistance to multiemployer plans increased from \$56,153 million at September 30, 2018, to \$67,995 million at September 30, 2019, an increase of \$11,842 million or 21 percent (see Note 7). The largest component of the \$67,995 million total in future financial assistance liability is the \$65,188 million liability for probable insolvent plans, of which \$53,604 million is attributable to the 10 largest multiemployer probable plans.

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 53. The Multiemployer Program reported a net loss of \$11,290 million in FY 2019 compared with a net income of \$11,176 million in FY 2018. This resulted in a negative net position of \$65,166 million in FY 2019 compared with a negative net position of

\$53,876 million in FY 2018. In FY 2019, the Multiemployer Program experienced its largest negative net position to date.

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

- (1) An unfavorable change in the pension liability valuation interest factors, which generated a \$10,926 million increase in Multiemployer Program liabilities (\$10,629 million related to multiemployer probable plans and \$297 million to multiemployer insolvent plans).
- (2) Addition of 15 new plans that resulted in a \$2,015 million increase in program liabilities.
- (3) Expected interest on benefit liabilities, which resulted in a \$1,619 million increase in program liabilities.
- (4) Deletion of seven probable plans and one insolvent plan from the multiemployer inventory of plans that resulted in a \$1,355 million reduction in program liabilities.

PBGC uses a curve of one-year forward rates (interest factors) to value pension liabilities. The curve of one-year forward rates (interest factors) for September 30, 2019, starts with an interest factor of 2.36% in year 1 and varies annually for each year thereafter until year 31 when the factor becomes 1.98% for the remaining years. The curve of one-year forward 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. (See Note 6 on page 83 for the table of interest factors used.)

During FY 2019, PBGC paid \$160 million in financial assistance to 89 insolvent plans. At year-end, there were 85 insolvent plans expected to continue receiving financial assistance covering about 66,900 participants in pay status with an additional 27,300 participants entitled to benefits once they retire. Comparatively, in FY 2018, PBGC paid \$153 million in financial assistance to 81 insolvent plans, covering about 62,300 participants in pay status at the time.

MULTIEMPLOYER UNDERWRITING ACTIVITY

As shown on the Statements of Operations and Changes in Net Position on page 53, underwriting activity reflected a net loss of \$11,361 million in FY 2019. This was attributed to a \$11,662 million loss from insolvent and probable plans - financial assistance (primarily due to unfavorable charges to multiemployer probable plans of \$10,629 million from the change in interest factors, charges due to expected interest on benefit liabilities of \$1,545 million, charges from new plans of \$1,881 million, offset by deleted plans of \$1,355 million), and \$40 million in administrative expense, offset by \$310 million in net premium income and \$31 million in credits due to actuarial adjustments.

The multiemployer flat rate premium for plan years beginning in 2019 increased to \$29 per participant from the 2018 rate of \$28 per participant. Net premium income increased by \$18 million in FY 2019 to a total of \$310 million from \$292 million in FY 2018.

MULTIEMPLOYER FINANCIAL ACTIVITY

As shown on the Statements of Operations and Changes in Net Position on page 53, financial activity reflected a net gain of \$71 million for FY 2019. This was attributed to \$442 million gain from fixed income investments, offset by charges of \$297 million due to change in interest factors for plans known to be

insolvent and plans about to begin receiving financial assistance and a charge of \$74 million due to expected interest. As required by law, Multiemployer Program investments consist solely 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 2019 (2.95%) increased compared to the factor at the beginning of FY 2018 (1.54%). The multiemployer expected interest charges increased from \$40 million in FY 2018 to \$74 million in FY 2019.

IV.C MISSING PARTICIPANTS PROGRAM

The Missing Participants Program (Program) is governed by Section 4050 of ERISA. Under the Program, the benefits of missing participants can be transferred to PBGC or PBGC can be informed about other arrangements for distributing the missing participants' benefits. Through PBGC's search efforts and its centralized online searchable database, the Program helps participants find and receive the benefits being held for them. The expanded Program is designed to cover defined benefit single-employer plans that terminated under a standard termination, and as well as the terminations of defined contribution plans, small professional service pension plans, and multiemployer plans. Plans in the Program are categorized as follows:

- Original (legacy) PBGC Insured Defined Benefit Single-Employer Plans (plans terminating on or before 12/31/2017)
- PBGC Insured Defined Benefit Single-Employer Plans (plans terminating on or after 01/01/2018)
- Defined Contribution Plans noncovered by PBGC
- Small Professional Services Plans Defined Benefit noncovered by PBGC
- PBGC Insured Multiemployer Plans

Note: A standard termination is when a sponsor of a PBGC insured defined benefit single-employer plan pays all the benefits it owes in a fully funded plan.

The September 30, 2019 total combined PVFB for the Missing Participants Program was \$116 million for the participants whose benefits were transferred to PBGC, compared to \$87 million at September 30, 2018, and is reported under "Present value of future benefits – Trusteed plans" on PBGC's balance sheet. This liability includes interest from the date of transfer at the Federal mid-term rate and is offset by the unlocatable participants' benefit payments (\$30 million in FY 2019 compared to \$24 million in FY 2018) that were transferred to the PBGC by plan sponsors and subsequent investment earnings.

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 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 2018 Projections Report shows that the Multiemployer Program continues to show a very high likelihood of insolvency during FY 2025, and that insolvency is a near certainty by the end of FY 2026.

FY 2019 combined premium cash receipts totaled \$5,784 million, a decrease of \$781 million from \$6,565 million in FY 2018, largely due to improved conditions of plans' underfunding, which resulted in lower variable rate premium income. The FY 2019 decrease of \$781 million primarily reflects peak filing and the payment of premiums in October 2018 for plan year 2018 premium filings which were lower than peak filing and the payment of premiums in October 2017 for plan year 2017 premium filings. Net cash flow used by investment activities decreased to \$2,398 million in FY 2019 versus \$2,900 million used in FY 2018. In FY 2019, PBGC's cash receipts of \$9,335 million from operating activities of the Single-Employer Program were sufficient to cover its operating cash obligations of \$7,178 million. This resulted in net cash provided by operating activities of \$2,157 million (as compared to net cash provided by operating activities of \$3,048 million in FY 2018). When the single-employer cash used through investing activities of \$2,240 million is added to this net cash provided, the Single-Employer Program in the aggregate experienced a net cash decrease of \$83 million.

In the Multiemployer Program, cash receipts of \$399 million from operating activities were sufficient to cover its operating cash obligations of \$216 million, resulting in net cash provided by operations of \$183 million. When this net cash provided is added to net cash used through investing activities of \$158 million, the Multiemployer Program in the aggregate experienced an overall net cash increase of \$25 million.

During FY 2019, PBGC recovered \$166 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 2019, PBGC's combined net decrease in cash and cash equivalents amounted to \$58 million, arising from a decrease of \$83 million for the Single-Employer Program and an increase of \$25 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 \$154,673 million at September 30, 2019, and \$175,439 million at September 30, 2018. 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 2019, this exposure was concentrated in the following sectors: manufacturing; transportation; communications; utilities, and services.

PBGC estimates that, as of September 30, 2019, it is reasonably possible that multiemployer plans may require future financial assistance of \$10,871 million, compared to \$9,410 million at September 30, 2018. The primary reasons for the increase in exposure were due to unfavorable changes in interest rate assumptions, the significant drop in yield curve rates as compared to the prior year, and the addition of six new plans (\$3,177 million net liability) classified as reasonably possible, less eight plans (\$2,163 million net liability) from the prior year that are no longer classified as reasonably possible (plans removed due to improvements in the plans' financial condition or reclassified to other categories).

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 2019, 1,782 plans filed standard terminations. The number of filings has increased significantly this year; up from a 5-year average of 1,427. Eleven large plans filed a standard termination, almost three times the number of large plans that filed last year.

In FY 2019, large plans that completed standard terminations were Rocky Flats Retirement Plan, AutoZone Inc. Associates' Pension Plan, and The Sherwin-Williams Company Salaried Employees Pension Plan.

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. The number of standard terminations has increased significantly by 33 percent in the last three years. The number of mid-size and large plan terminations is expected to continue to increase.

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 (IPS) approved by the PBGC Board of Directors. The Board approved a new IPS in April 2019. New objectives listed in the IPS include utilizing Liability Driven Investment (LDI) techniques to minimize the Single-Employer Program funded status volatility and the risk of future deficits by increasing liability-hedging assets or reducing return-seeking assets according to the target asset allocations set out in the IPS. 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, 2019, were \$43,713 million (\$2,244 million for Fund 1, \$2,676 million for Fund 2, and \$38,793 million for Fund 7). Trust fund investments totaled \$77,082 million as of September 30, 2019. At the end of FY 2019, PBGC's total investments consisting of cash and cash equivalents, investments, and investment income receivable as shown on the Statements of Financial Position were \$120,795 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 approximately \$119,000 million as of September 30, 2019. Of the approximate \$1,800 million difference between the September 30, 2019, investment assets reported on the Statements of Financial Position and the assets within PBGC's investment performance portfolio, approximately \$700 million represent net unsettled purchases, \$500 million for funds available for the following month's benefit payments, \$500 million are newly trusteed assets that have not yet been commingled, and \$100 million represent custodial bank holding accounts. 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 79 percent of total assets under performance management invested at the end of FY 2019, compared with approximately 70 percent for FY 2018. Equity securities (i.e., public equities) represented about 21 percent of total assets under performance management invested at the end of FY 2019, compared with about 29 percent at the end of FY 2018. The Total Fund Composite return (excluding private market assets and transition accounts) for FY 2019 was 14.65 percent compared with 1.35 percent in FY 2018. The returns reflect very strong bond market performance, partially mitigated by weaker equity performance during the period. A small percentage of PBGC's investments are in the process of moving out of one of the manager portfolios (0.01 percent of total investment assets at the end of FY 2019, compared with 0.03 percent at the end of FY 2018) either for liquidation or for transfer to another manager. The return of the Total Fund Composite including these transition accounts was 14.64 percent in FY 2019, compared to 1.30 percent in FY 2018. Private market assets, comprised largely of private equity, private debt, and private real estate that are currently part of PBGC's investment portfolio, represented about 0.5 percent of total investments at the end of FY 2019, compared with 0.7 percent of total investments at the end of FY 2018.

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, 2019, PBGC's annualized return on total invested funds excluding private market assets and transition accounts was 6.36 percent compared with a total fund benchmark return of 6.00 percent — a benchmark based on the relative weights of the underlying managed accounts. Including the transition accounts, the five-year annualized return was 6.30 percent. Separately, the annualized ERISA/PPA hypothetical portfolio benchmark return for the five-year period ending September 30, 2019, was 8.04 percent. (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, 2019 2018		Three and Five Years Ended September 30, 2019		
			<u>3 yrs</u>	<u>5 yrs</u>	
Total Fund Composite	14.65%	1.35%	7.04%	6.36%	
Total Fund Benchmark ¹	14.37	1.01	6.65	6.00	
ERISA/PPA Portfolio Benchmark ²	6.99	10.10	9.33	8.04	
Total Global Public Stock	2.49	9.65	9.75	7.66	
Total Global Public Stock Benchmark ³	2.14	9.07	9.30	7.16	
Total Global Bonds	19.98	(2.17)	5.72	5.84	
Total Global Bonds Benchmark ⁴	19.68	(2.42)	5.33	5.53	
Smaller Asset Managers Pilot Program ⁵	10.21	(0.81)	3.25	n/a	
Trust Funds	12.26	3.05	8.09	6.96	
Revolving Funds	19.11	(2.15)	4.46	4.76	
Indices					
Russell 3000 Index	2.92	17.58	12.83	10.44	
MSCI ACWI ex-U.S. IMI Index	(1.84)	1.79	6.10	3.05	
Dow Jones U.S. Select Real Estate Securities Index	16.41	4.59	6.48	9.69	
Bloomberg Barclays Treasury Index	10.48	(1.62)	2.24	2.91	
Bloomberg Barclays Aggregate Bond Index	10.30	(1.22)	2.92	3.38	

¹The 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).

³The 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.

⁴The 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.

⁵The performance inception date for the Smaller Asset Managers Pilot Program was August 2016. As such, 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, 2019, 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, 2019, the weighted benchmark encompasses the Completion Treasuries Benchmark (17.0 percent), the Non-Completion Treasuries Benchmark (38.2 percent), the Total Long Duration Bonds Benchmark (23.5 percent), the Bloomberg Barclays Aggregate Bond index (13.8 percent), the Total High Yield Bonds Benchmark (1.2 percent), and the Total Emerging Market Bonds Benchmark (6.3 percent). The overall Total Global Bonds composite equals 75.6 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 12.9 percent of PBGC's investment program assets as of September 30, 2019. The assets of this category are split among the Revolving Fund (50.0 percent) and Trust Fund (50.0 percent). 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 28.9 percent of PBGC's investment program assets as of September 30, 2019. The Non-Completion Treasuries Benchmark encompasses the Bloomberg Barclays U.S. Long Treasury index (80.0 percent) and the Bloomberg Barclays U.S. Treasury Intermediate index (20.0 percent). 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 17.7 percent of PBGC's investment program assets as of September 30, 2019. 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, 2019, the Total Long Duration Bonds Benchmark encompasses the Bloomberg Barclays Long U.S. Government/Credit index (19.6 percent), Bloomberg Barclays U.S. Long Credit index (3.3 percent) and Custom Benchmarks (77.1 percent). 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.

<u>Core:</u> This category includes investments primarily in USD-denominated fixed income securities managed by outside professional asset managers. It applies to 10.5 percent of PBGC's investment program assets as of September 30, 2019. 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.

High Yield: 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, 2019. 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, 2019, the weighted benchmark encompasses the Bloomberg Barclays U.S. High Yield Ba/B 1% Issuer Capped index (47.8 percent), the Bloomberg Barclays U.S. High Yield 2% Issuer Capped index (20.9 percent) and the Bloomberg Barclays U.S. High Yield Ba/B 2% Issuer Capped index (31.3 percent). 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 percent 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 and below. 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 percent 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 percent of the index instead of 1 percent of the index. PBGC is able to redeem composite assets upon request.

Emerging Market Bonds: 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 4.8 percent of PBGC's investment program assets as of September 30, 2019. 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, 2019, the weighted benchmark encompasses the JP Morgan EMBIG Diversified index (54.0 percent), JP Morgan GBI EM Global Diversified (10.0 percent) and Custom Benchmarks (36.0 percent). 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, 2019, the weighted benchmark encompasses the 3-month Treasury bill (43.1 percent) and the 4-week Treasury bill (56.9 percent). The cash composite represents 2.4 percent of PBGC's investment program as of September 30, 2019. 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 20.6 percent of PBGC's investment program assets as of September 30, 2019. 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, 2019, the Total Global Public Stock Benchmark comprises the Total U.S. Public Stock Benchmark (53.2 percent) and the Total International Public Stock Benchmark (46.8 percent). 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 11.0 percent of PBGC's investment program assets as of September 30, 2019. 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, 2019, the weighted benchmark comprises the Russell 3000 index (81.7 percent), the Dow Jones U.S. Select Real Estate Securities index (6.5 percent), and the FTSE NAREIT EQ REITs index (11.8 percent). 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 9.6 percent of PBGC's investment program assets as of September 30, 2019. 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, 2019, the weighted benchmark encompasses the MSCI EAFE index (52.3 percent), MSCI EAFE IMI index (6.8 percent), the MSCI EAFE Small Cap index (8.7 percent), the MSCI Emerging Markets index (25.2 percent), and the MSCI Canada index (7.0 percent). 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 0.8 percent of PBGC's investment program assets as of September 30, 2019. 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 0.5 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 decreased the assets of the Corporation by about \$8.6 billion (6.99 percent return compared with PBGC's Total Fund Composite return including transition accounts of 14.64 percent) for the one-year period ending September 30, 2019, and increased the assets of the Corporation by about \$8.5 billion (8.04 percent annualized return

compared with PBGC's Total Fund Composite annualized return including transition accounts of 6.30 percent) over the five-year period ending September 30, 2019. PBGC invests its portfolio with a Liability-Driven Investment strategy and, therefore, the comparison to a typical pension plan with a 60 percent equity/40 percent 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								
	60/40		PBGC	60/40		PBGC			
	Incremental	60/40	Actual	Incremental	60/40	Actual			
Fiscal Year	\$ Billions	% Return	Return ¹	\$ Billions	% Return	Return ¹			
9/30/2018	\$8.7	10.10%	1.30%	\$21.4	9.28%	5.06%			
9/30/2019	(\$8.6)	6.99%	14.64%	\$8.5	8.04%	6.30%			

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 requirements of the Federal Managers' Financial Integrity Act (FMFIA), the Government Accountability Office (GAO) Standards for Internal Control in the Federal Government (Green Book), the Office of Management and Budget (OMB) Circular A-123, Management's Responsibility for Enterprise Risk Management and Internal Control, and other laws and regulations. PBGC has continued implementing the new requirements specified in the last revision to the GAO Green Book and OMB Circular A-123 and, as noted below, performs a number of corporate-wide activities that serve to support the FMFIA Statement of Assurance. For FY 2019, 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 business area of the agency, including the Risk Management Officer (RMO) and a representative of the OIG, both of whom are non-voting members. The ICC approves major changes to key business 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 also coordinates with the agency's Risk Management Council (RMC) regarding their oversight of the Corporation's risk assessment processes.

DOCUMENTATION AND TESTING OF CONTROLS

As part of the Internal Controls Program, key controls are evaluated, on a test basis, to assess the adequacy of the control design and the extent to which they are operating effectively. Reports regarding 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, provides criteria to be used by federal agencies for designing, implementing and operating an effective internal control system. In FY 2019, under ICC direction, management continued its comprehensive evaluation of the agency's control activities supporting the five components and 17 underlying principles of internal control, as required by the Green Book. Simultaneously, the ICC approved the addition and revision of key business and entity-wide controls to ensure continued compliance with the GAO and OMB requirements.

Business Level Controls: Cycle memoranda documenting the 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 and Payroll; Investments; Losses on Completed and Probable Terminations; Multiemployer Financial Assistance; Procurement Accounts Payable and Other Expenses; Premiums; Single-Employer Contingent Liability, and Present Value of Future Benefits. The ICC has designated certain controls as key internal controls over operations, reporting and compliance 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 five components and 17 underlying control principles of internal controls, as required by the Green Book, and the related categories of objectives.

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 in FY 2019. 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. As part of the Framework, potential fraud areas are identified, and key controls are evaluated/implemented as proactive measures to prevent fraud. Monitoring activities include supervisory approvals, management reports, and exception reporting. PBGC management performs due diligence in areas of suspected or alleged fraud.

Information Technology Controls: In order to protect the confidentiality, integrity, and availability of the 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.

Digital Accountability and Transparency Act (DATA Act): The DATA Act of 2014 was designed to increase the standardization and transparency of federal spending. It requires the disclosure of direct federal agency expenditures and linking federal contract, loan, and grant spending information of federal agencies to enable taxpayers and policymakers to track federal spending more effectively. The law required the establishment of government-wide data standards established by the OMB and the Department of the Treasury to provide consistent, reliable, researchable, and usable spending data on USASpending.gov. In FY 2019, the ICC approved key controls over data quality to support the achievement of the reporting objective in accordance with the DATA Act. PBGC complied with the requirements of the DATA Act Submission with few exceptions and has initiated corrective actions to close all recommendations. Further, as required by Appendix A to OMB Circular A-123, Management of Reporting and Data Integrity Risk (memorandum M-18-16), the agency developed and maintained a Data Quality Plan that considers incremental risks and mitigating controls surrounding the representation of federal spending data in accordance with OMB requirements. Consideration of the plan was included in the agency's annual assurance statement for FY 2019, as described below.

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 risk assessments in FY 2019 for multiemployer financial assistance and contractor 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 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 2019.

ENTERPRISE RISK MANAGEMENT ACTIVITIES

As a part of the Corporation's Enterprise Risk Management (ERM) activities, the Risk Management Council (RMC) conducted an agency-wide risk assessment, which formed its FY 2019 Risk Profile. The RMC –

chaired by the Risk Management Officer – also met with risk owners who are working on mitigation strategies for PBGC's top risks. In addition, an ERM maturity model was developed, which was used to measure the maturity of the agency's ERM program, and the RMC documented and disseminated ERM commonly used terms to the workforce. Continued integration of ERM principles into key decision-making processes fostered a risk-aware culture and there was an increase in the percentage of personnel that agreed or strongly agreed that "My supervisor encourages subordinates to bring operational, reporting, compliance or internal control risks to their attention" (from 74.7 percent of PBGC FedView Survey respondents in 2016 to 81 percent of respondents in 2018).

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

The heads of departments, divisions, and offices within PBGC performed assessments of risk and internal controls in accordance with OMB Circular A-123. These assessments addressed several different considerations affecting internal control objectives, 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), data quality, and the 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 consideration of other relevant factors, PBGC's executive management recommended, and the Director approved, the FY 2019 FMFIA Statement of Assurance, included below.

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, 2019.

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, 2019, and September 30, 2018, 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, 2019, and September 30, 2018, 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 2019 and 2018 financial statements, and CliftonLarsonAllen LLP issued an unmodified opinion on those financial statements.

Gordon Hartogensis

Gran A. Hanggersi

Director

Patricia Kelly

Chief Financial Officer

Patricia Kelly

November 15, 2019

STATEMENTS OF FINANCIAL POSITION

	0	Single-Employer Program		Multiemployer Program		andum tal
(Dollars in Millions)	Sept 2019	ember 30, 2018	Septer 2019	mber 30, 2018	Sept 2019	ember 30, 2018
ASSETS						
Cash and cash equivalents	\$5,494	\$5,577	\$108	\$83	\$5,602	\$5,660
Securities lending collateral (Notes 3 and 5)	4,719	4, 010	-	-	4,719	4,010
Investments, at market (Notes 3 and 5):						
Fixed maturity securities	86,736	64,527	2,550	2,035	89,286	66,562
Equity securities	22,277	26,613	-	-	22,277	26,613
Private equity	379	510	-	-	379	510
Real estate and real estate investment trusts	2,568	3,428	-	-	2,568	3,428
Other	6	7			6	7
Total investments	111,966	95,085	2,550	2,035	114,516	97,120
Receivables, net:						
Sponsors of terminated plans	20	21	-	-	20	21
Premiums (Note 11)	4,515	3,600	181	172	4,696	3,772
Sale of securities	423	523	-	-	423	523
Derivative contracts (Note 4)	248	449	-	-	248	449
Investment income	659	648	18	19	677	667
Other	6	4		_	6	4
Total receivables	5,871	5,245	199	191	6,070	5,436
Capitalized assets, net	18	24_	1	2	19	26
Total assets	\$128,068	\$109,941	\$2,858	\$2,311	\$130,926	\$112,252

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

The Single-Employer Program and Multiemployer Program are separate by law.

The "Memorandum Total" data columns presented above are solely an entity-wide informational view of the PBGC's two independent insurance programs.

STATEMENTS OF FINANCIAL POSITION

	0	Employer	Multier			randum
	Program September 30,		Program		Total	
			Septe	September 30,		September 30,
(Dollars in Millions)	2019	2018	2019	2018	2019	2018
LIABILITIES						
Present value of future benefits, net (Note 6):						
Trusteed plans	\$112,814	\$99,899	-	-	\$112,814	\$99,899
Plans pending termination and trusteeship	96	150	-	-	96	150
Settlements and judgments	17	18	-	-	17	18
Claims for probable terminations	173	1,799		-	173	1,799
Total present value of future benefits, net	113,100	101,866	-	-	113,100	101,866
Present value of nonrecoverable future						
financial assistance (Note 7)						
Insolvent plans	-	-	2,807	2,394	2,807	2,394
Probable insolvent plans			65,188	53,759	65,188	53,759
Total present value of nonrecoverable						
future financial assistance		-	67,995	56,153	67,995	56,153
Payables, net:						
Derivative contracts (Note 4)	192	430	-	-	192	430
Due for purchases of securities	1,159	1,019	-	-	1,159	1,019
Payable upon return of securities loaned	4,719	4,010	-	-	4,719	4,010
Unearned premiums	176	125	6	11	182	136
Accounts payable and accrued expenses (Note 8)	66	52	23	23	89	75
Total payables	6,312	5,636	29	34	6,341	5,670
Total liabilities	119,412	107,502	68,024	56,187	187,436	163,689
Net position	8,656	2,439	(65,166)	(53,876)	(56,510)	(51,437)
Total liabilities and net position	\$128,068	\$109,941	\$2,858	\$2,311	\$130,926	\$112,252

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

The Single-Employer Program and Multiemployer Program are separate by law.

The "Memorandum Total" data columns presented above are solely an entity-wide informational view of the PBGC's two independent insurance programs.

STATEMENTS OF OPERATIONS AND CHANGES IN NET POSITION

	Single-Er Progr		Multien Prog		Memora Tot	
	For the Years Ended September 30,		For the Years Ended September 30,		For the Years Ended September 30,	
(Dollars in Millions) UNDERWRITING:	2019	2018	2019	2018	2019	2018
Income:	ec 252	\$ E E10	¢210	\$292	\$6.662	ØE 010
Premium, net (Note 11) Other	\$6,352	\$5,518	\$310	\$292	\$6,662	\$5,810
Total	6 200	5 556	310	202	6 700	5 9 4 9
•	6,399	5,556		292	6,709	5,848
Expenses:	265	266	40	44	405	407
Administrative	365	366	40	41	405	407
Other	14	6			14	6
Total	379	372	40	41	419	413
Other underwriting activity:						
Losses (credits) from completed and						
probable terminations (Note 12)	91	(322)	-	-	91	(322)
Losses (credits) from insolvent and probab	ble					
plans-financial assistance (Note 7)	-	-	11,662	(10,830)	11,662	(10,830)
Actuarial adjustments (credits) (Note 6)	(811)	(528)	(31)	(22)	(842)	(550)
Total	(720)	(850)	11,631	(10,852)	10,911	(11,702)
Underwriting gain (loss)	6,740	6,034	(11,361)	11,103	(4,621)	17,137
FINANCIAL:						
Investment income (loss) (Note 13):						
Fixed	14,350	(1,432)	442	(52)	14,792	(1,484)
Equity	61	2,733	-	-	61	2,733
Private equity	17	93	-	-	17	93
Real estate	386	105	-	-	386	105
Other	6	3_			6	3
Total	14,820	1,502	442	(52)	15,262	1,450
Expenses:						
Investment	123	123	-	-	123	123
Actuarial charges (Note 6):						
Due to expected interest	2,950	1,668	74	40	3,024	1,708
Due to change in interest factors	12,270	(7,608)	297_	(165)	12,567	(7,773)
Total	15,343	(5,817)	371	(125)	15,714	(5,942)
Financial gain (loss)	(523)	7,319	71	73	(452)	7,392
Net income (loss)	6,217	13,353	(11,290)	11,176	(5,073)	24,529
Net position, beginning of year	2,439	(10,914)	(53,876)	(65,052)	(51,437)	(75,966)
Net position, end of year	\$8,656	\$2,439	(\$65,166)	(\$53,876)	(\$56,510)	(\$51,437)

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

The Single-Employer Program and Multiemployer Program are separate by law.

The "Memorandum Total" data columns presented above are solely an entity-wide informational view of the PBGC's two independent insurance programs.

STATEMENTS OF CASH FLOWS

	Single-Employer Program		Multiem Progr	1 ,	Memor To	
	For the Years Ended		For the Yea		For the Ye	
(Dollars in millions)	Septemb		September 30,		September 30,	
	2019	2018	2019	2018	2019	2018
OPERATING ACTIVITIES:						
Premium receipts	\$ 5,488	\$ 6,262	\$ 296	\$ 303	\$ 5,784	\$ 6,565
Interest and dividends received	3,425	3,030	103	93	3,528	3,123
Cash received from plans upon trusteeship	385	33	-	-	385	33
Receipts from sponsors/non-sponsors	(115)	579	-	-	(115)	579
Receipts from the missing participant program	35	24	-	-	35	24
Other receipts	2	2	-	-	2	2
Benefit payments – trusteed plans	(5,960)	(5,757)	-	-	(5,960)	(5,757)
Financial assistance payments	-	-	(160)	(153)	(160)	(153)
Settlements and judgments	(1)	(2)	-	-	(1)	(2)
Payments for administrative and other expenses	(471)	(473)	(27)	(29)	(498)	(502)
Accrued interest paid on securities purchased	(631)	(650)	(29)	(36)	(660)	(686)
Net cash provided (used) by operating activities (Note 15)	2,157	3,048	183	178	2,340	3,226
INVESTING ACTIVITIES:						
Proceeds from sales of investments	133,096	116,772	4,891	4,314	137,987	121,086
Payments for purchases of investments	(135,336)	(119,428)	(5,049)	(4,558)	(140,385)	(123,986)
Net change in investment of securities lending collateral	710	904	-	-	710	904
Net change in securities lending payable	(710)	(904)	-	-	(710)	(904)
Net cash provided (used) by investing activities	(2,240)	(2,656)	(158)	(244)	(2,398)	(2,900)
Net increase (decrease) in cash and cash equivalents	(83)	392	25	(66)	(58)	326
Cash and cash equivalents, beginning of year	5,577	5,185	83	149	5,660	5,334
Cash and cash equivalents, end of year	\$ 5,494	\$ 5,577	\$ 108	\$ 83	\$ 5,602	\$ 5,660

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

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

The Single-Employer Program and Multiemployer Program are separate by law.

The "Memorandum Total" data columns presented above are solely an entity-wide informational view of the PBGC's two independent insurance programs.

NOTES TO FINANCIAL STATEMENTS

September 30, 2019 and 2018

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. PBGC's 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, 2019, the Single-Employer and Multiemployer Programs reported net positions of \$8,656 million and (\$65,166) million, respectively. The Single-Employer Program had assets of \$128,068 million offset by total liabilities of \$119,412 million, which include a total present value of future benefits (PVFB) of \$113,100 million. As of September 30, 2019, the Multiemployer Program had assets of \$2,858 million offset by \$67,995 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 2018 Projections Report shows that the Multiemployer Program continues to show a very high likelihood of insolvency during FY 2025, and that insolvency is a near certainty by the end of FY 2026.

PBGC's \$120,795 million of total investments (including cash and investment income receivable) represents the largest component of PBGC's Statements of Financial Position combined assets of \$130,926 million at September 30, 2019. This amount of \$120,795 million (as compared to investments under management of \$118,961 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 (\$95,555 million) represent 79 percent of the total investments, while equity securities (\$22,287 million) represent 19 percent of total investments. Private market assets, real estate, and other investments (\$2,953 million), represent 2 percent of the total investments.

SINGLE-EMPLOYER AND MULTIEMPLOYER PROGRAM EXPOSURE

PBGC's estimate of the total underfunding in single-employer plans was \$154,673 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, 2019. This is a decrease of \$20,766 million from the reasonably possible exposure of \$175,439 million in FY 2018. This decrease is primarily due to the increase in the interest factors used for valuing liabilities and 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 2019, this exposure is concentrated in the following sectors: manufacturing, transportation/communications/utilities, and services.

PBGC estimates that as of September 30, 2019, it is reasonably possible that multiemployer plans may require future financial assistance in the amount of \$10,871 million (see Note 9). This is an increase of \$1,461 million from the reasonably possible exposure of \$9,410 million in FY 2018. The primary reasons for the increase in exposure were due to the unfavorable changes in interest rate assumptions, the significant drop in yield curve rates, and the unfavorable effect of the addition and deletion of plans to the multiemployer inventory, as compared to the prior year.

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 PBGC 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 August 2018, the FASB issued Accounting Standards Update (ASU) 2018-13, "Changes to the Disclosure Requirements for Fair Value Measurement" which modifies disclosure requirements for fair value measurements. The guidance is effective for fiscal years beginning after December 15, 2019, and for interim periods within those fiscal years. PBGC has evaluated the impact of this guidance to the Financial Statement disclosures and will modify the disclosures in accordance with this ASU upon adoption. This ASU includes eliminating the requirement to disclose the amounts and reasons for transfers between level 1 and level 2 of the fair value hierarchy, and modifies the disclosure requirement relating to investments in funds at net asset value (NAV).

VALUATION METHOD

A key 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 exdividend 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. PBGC believes it is likely that one or more events subsequent to the 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 initiating plan termination. In addition, PBGC 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 of the plan. 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 benefits. 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 plans that are at risk of becoming probable and reasonably possible claims on the insurance program. Regulatory filings with PBGC and the other ERISA agencies are important to this analysis and determination of risk, especially the designation of critical and declining status, which means the plan is projecting insolvency within 15-20 years. 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 uses specific criteria for classifying multiemployer plans as insolvent (PBGC's insurable event for multiemployer plans), probable, and reasonably possible. 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:
 - o Within 10 years are classified as probable.
 - o From 10 to 20 years are classified as reasonably possible.

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

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.

MPRA provides that certain plans may apply to the U.S. 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 U.S. Treasury for benefit suspension. These actions do not affect the determination of the nonrecoverable future financial assistance liability until U.S. Treasury has issued the final authorization to suspend benefits in the case of a benefit suspension application, or until PBGC has approved the application for financial assistance, in the case of a facilitated merger or a partition request.

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 ten 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, 2019. 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, 2019, TBA receivables were \$251 million and no Bond Forward receivables were reported. In addition, as of September 30, 2019, TBA payables were \$594 million and no Bond Forward payables were reported.

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

	Septem		Septem	
	20	19 Market	201	18 Market
(Dollars in millions)	Basis	Value	Basis	Value
Fixed maturity securities:				
U.S. Government securities	\$47,540	\$52,120	\$38,273	\$37,550
Commercial paper/securities purchased under repurchase agreements	251	251	250	250
Asset backed securities	4,463	4,584	3,188	3,123
Pooled funds				
Domestic	4,536	4,514	915	688
International	-	-	-	-
Global/other	0 *	0 *	-	-
Corporate bonds and other	14,851	16,256	14,254	14,043
International securities	8,778	9,011	9,245	8,873
Subtotal	80,419	86,736	66,125	64,527
Equity securities:				
Domestic	308	269	378	405
International	1,802	1,935	1,765	1,953
Pooled funds				
Domestic	6,740	10,691	8,673	13,335
International	5,736	9,380	6,425	10,920
Global/other	2	2	0 *	0 *
Subtotal	14,588	22,277	17,241	26,613
Private equity	1,158	379	1,204	510
Real estate and real estate investment trusts	2,232	2,568	3,033	3,428
Insurance contracts and other investments	5_	6_	6_	7_
Total ¹	\$98,402	\$111,966 ²	\$87,609	\$95,085

^{*} Less than \$500,000

INVESTMENTS OF MULTIEMPLOYER REVOLVING FUNDS AND MULTIEMPLOYER TRUSTEED PLANS

	September 30,		September 30,		
	201	2019		8	
		Market		Market	
(Dollars in millions)	Basis	Value	Basis	Value	
Investment securities:					
Fixed U.S. Government securities	\$2,328	\$2,550	\$2,073	\$2,035	
Equity securities					
Total	\$2,328	\$2,550	\$2,073	\$2,035	

¹ Total includes securities on loan at September 30, 2019, and September 30, 2018, with a market value of \$5,357 million and \$4,439 million, respectively.

² This total of \$111,966 million of investments at market value represents the single-employer assets only.

INVESTMENT PROFILE

	September 30,		
	2019	2018	
Fixed Income Assets	<u> </u>		
Average Quality	AA	A	
Average Maturity (years)	16.6	19.4	
Duration (years)	13.4	15.1	
Yield to Maturity (%)	2.7	4.0	
Equity Assets			
Average Price/Earnings Ratio	19.2	19.3	
Dividend Yield (%)	2.5	2.4	
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 2019 and 2018, 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 or to make settlement based on comparable economics, but without actually delivering the foreign currency. 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, 2019 and 2018, 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, 2019 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.
- Offsetting of Derivative Assets Presents the impact of legally enforceable master netting agreements on derivative assets.
- Offsetting of Derivative Liabilities Presents the impact of legally enforceable master netting agreements on derivative liabilities.

FAIR VALUES OF DERIVATIVE INSTRUMENTS

	Asset Derivative					
		Septembe	r 30, 2019		September	30, 2018
	Statements of Financial			Statements of Financia	ıl	
(Dollars in millions)	Position Location	Notional	FMV	Position Location	Notional	FMV
Futures	Derivative Contracts	\$15,378	\$5	Derivative Contracts	\$17,557	\$2
Swap contracts Interest rate swaps Other derivative swaps	Investments-Fixed Investments-Fixed	815 904	(24) 24	Investments-Fixed Investments-Fixed	1,626 543	20 10
Option contracts	Investments-Fixed	9	1	Investments-Fixed	122	1
Forwards - foreign exchange	Investments-Fixed Investments-Equity	4 , 341 -	3	Investments-Fixed Investments-Equity	5,111 -	(10)

	Liability Derivative						
		Septembe	September 30, 2019			September 30, 2018	
	Statements of Financial	Statements of Financial					
(Dollars in millions)	Position Location	Notional	FMV	Position Location	Notional	FMV	
Futures	Derivative Contracts	\$2,249	(\$160)	Derivative Contracts	\$2,496	(\$329)	
Option contracts	Derivative Contracts	172	(1)	Derivative Contracts	355	(1)	

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

	September 30, 2019			September 30, 2018		
(Dollars in millions)	Gross Amount of Recognized Assets	Gross Amounts Offset in Statements of Financial Position	Net Amounts of Assets Presented in Statements of Financial Position	Gross Amount of Recognized Assets	Gross Amounts Offset in Statements of Financial Position	Net Amounts of Assets Presented in Statements of Financial Position
<u>Derivatives</u>				_		
Interest-rate contracts	\$ 0*	\$ 0*	\$ 0*	\$ 0*	\$ 0*	\$ 0*
Foreign exchange contracts	35	(18)	17	29	(19)	10
Other derivative contracts ¹	5	0*	5	2	(1)	1
Cash collateral nettings	-	2	2		-	=
Total Derivatives	\$40	(\$16)	\$24	\$31	(\$20)	\$11
Other financial instruments ² Repurchase agreements	576	-	576	404	-	404
Securities lending collateral	4,719	-	4,719	4,010	-	4,010
Total derivatives and other financial instruments	\$5,335	(\$16)	\$5,319	\$4,445	(\$20)	\$4,425

September 30, 2019

September 30, 2018

(Dollars in millions)	Gross Amounts Not Offset in Statements of Financial Position			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	\$ 576	\$ -	\$576	\$ 404	\$ -	\$404	
Security lending collateral	4,719	(4,719)		4,010	(4,010)	=	
Total	\$5,295	(\$4,719)	\$576	\$4,414	(\$4,010)	\$404	

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, 2019 September 30, 2018 Gross Net Amounts of Gross Net Amounts of Amounts Gross Amounts Assets Offset in Presented Offset in Presented Amount Statements of **Gross Amount** in Statements of of Statements of in Statements of of Recognized Financial Financial Financial Recognized Financial (Dollars in millions) Liabilities Position Position Liabilities Position Position Derivatives \$ 0* \$ 0* \$ 0* \$ 0* \$ 1 Interest-rate contracts \$ 1 32 39 20 Foreign exchange contracts (18)14 (19)0* 2 Other derivative contracts¹ 1 (1) (1) 1 0* Cash collateral nettings ()* **Total Derivatives** \$33 (\$19) \$14 \$42 (\$20) \$22 Other financial instruments² Resale agreements \$ -\$ -\$ -\$ -\$ -\$ -Securities lending collateral 4,719 4,719 4,010 4,010 Total derivatives and other financial instruments \$4,752 (\$19) \$4,733 \$4,052 (\$20)\$4,032

	S	September 30, 2018					
	Gross	Amounts Not Of	fset in	Gross Am	nounts Not Offs	et in	
(Dollars in millions)	Statements of Financial Position			Statements	of Financial Po	sition	
	Net Amount of			Net Amount of			
Liabilities				Liabilities			
Presented in			Presented in				
	Statements of			Statements of			
	Financial	Collateral		Financial	Collateral		
	Position	Received	Net Amount	Position	Received	Net Amount	
Resale agreements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Security lending collateral	4,719	(4,719)	-	4,010	(4,010)	-	
Total	\$4,719	(\$4,719)	\$ -	\$4,010	(\$4,010)	\$ -	

^{*} 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, 2019, and September 30, 2018.

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

		Amount of Gai	in or (Loss)
	Location of Gain or	Recognized in I	ncome on
	(Loss) Recognized	Derivat	ives
	in Income on	Sept. 30,	Sept. 30,
(Dollars in millions)	Derivatives	2019	2018
Futures			
Contracts in a receivable position	Investment Income-Fixed	(\$154)	\$55
Contracts in a receivable position	Investment Income-Equity	-	-
Contracts in a payable position	Investment Income-Fixed	1,812	(306)
Contracts in a payable position	Investment Income-Equity	-	-
Swap agreements			
Interest rate swaps	Investment Income-Fixed	(29)	46
Other derivative swaps	Investment Income-Fixed	13	(9)
Option contracts			
Options purchased (long)	Investment Income-Fixed	1	2
Options purchased (long)	Investment Income-Equity	-	0 *
Options written (sold short)	Investment Income-Fixed	(1)	0 *
Options written (sold short)	Investment Income-Equity	-	-
Forward contracts			
Forwards - foreign exchange	Investment Income-Fixed	31	(29)
	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, 2019, and through September 30, 2018, was \$5,613 million and \$4,026 million, respectively. The average value of lendable securities was \$31,118 million through September 30, 2019, and \$29,317 million through September 30, 2018. 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 18 percent through September 30, 2019 and 14 percent through September 30, 2018. The average utilization rate increase is primarily due to an increase in utilization of U.S. Corporate Bonds and Equity securities as discussed below.

The average value of U.S. Corporate Bonds and Equity securities on loan through September 30, 2019, was \$3,900 million, as compared to \$2,856 million through September 30, 2018. The average value of U.S. Corporate Bonds and Equity securities on loan is 70 percent of the \$5,613 million average value of securities on loan through September 30, 2019, as compared to 71 percent of the \$4,026 million average value of securities on loan through September 30, 2018. The average value of lendable U.S. Corporate Bonds and Equity securities was \$19,827 million through September 30, 2019, or 64 percent of PBGC's overall average value of lendable securities; while 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. The average utilization of U.S. Corporate Bonds and Equity securities was 20 percent through September 30, 2019 and 15 percent through September 30, 2018. The increase in the utilization of U.S. Corporate Bonds and Equity securities was caused by a shift in the lendable assets away from high yield bonds to investment grade bonds, which usually earn less lending revenue. To compensate for the reduction in revenue earned from lending high yield bonds, the securities lending program made a deliberate effort to increase the utilization of investment grade bonds.

The average value of U.S. Government securities on loan through September 30, 2019, was \$1,664 million, as compared to \$1,081 million through September 30, 2018. The average value of U.S. Government securities on loan was 30 percent of the \$5,613 million average value of securities on loan through September 30, 2019, as compared to 27 percent of the \$4,026 million average value of securities on loan through September 30, 2018. The average value of lendable U.S. Government securities through September 30, 2019, was \$7,575 million, or 24 percent of PBGC's overall average value of lendable securities; whereas 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. The average utilization of U.S. Government securities was 24 percent through September 30, 2019 and 23 percent through September 30, 2018.

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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, 2019	Sept. 30, 2019 Average Utilization Rates	Sept. 30, 2018 Average Utilization Rates
U.S. Corporate Bond & Equity	18%	20%	15%
U.S. Government Securities	12%	24%	23%
Non-U.S. Corporate Bond & Equity	3%	2%	2%
Non-U.S. Fixed Income	1%	1%	2%
Total PBGC Program	15%	18%	14%

The amount of cash collateral received for securities on loan at September 30, 2019, and September 30, 2018, was \$4,719 million and \$4,010 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 \$14 million from its agency securities lending programs as of September 30, 2019. 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 increased 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, 2019, PBGC had \$576 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 its outstanding repurchase agreements as of September 30, 2019.

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, 2019. Collateral deposits of \$229 million, which represent cash paid as collateral on certain derivative contracts, are shown below.

DERIVATIVE CONTRACTS

(Dollars in millions)	September 30, 2019	September 30, 2018
Open receivable trades on derivatives:		
Collateral deposits	\$229 ¹	\$370 ²
Futures contracts	5	2
Interest rate swaps	1	39
Other derivative swaps	13	38
Total	\$248	\$449

¹ For FY 2019, where a legally enforceable master netting agreement exists, amounts for "Receivables, net – Derivative Contracts" and "Payables, net – Derivative Contracts" will include net of cash collateral deposited for non-exchange traded derivatives which are subject to master netting agreements. Collateral deposits receivable are \$229 million (\$242 million gross collateral deposits receivable less \$13 million due to a netting of collateral deposits receivable and payable).

² For FY 2018, where a legally enforceable master netting agreement exists, amounts for "Receivables, net – Derivative Contracts" and "Payables, net – Derivative Contracts" will include net of cash collateral deposited for non-exchange traded derivatives which are subject to master netting agreements. Collateral deposits receivable are \$370 million (\$379 million gross collateral deposits receivable less \$9 million due to a netting of collateral deposits receivable and payable).

Amounts in the Derivative Contracts table below represent derivative contracts in a payable position at September 30, 2019, which PBGC reflects as a liability. Collateral deposits of \$19 million, which represent cash received as collateral on certain derivative contracts, are included.

DERIVATIVE CONTRACTS

(Dollars in millions)	September 30, 2019	September 30, 2018
Open payable trades on derivatives:		
Collateral deposits	\$19	\$40 ²
Futures contracts	159	328
Interest rate swaps	1	23
Other derivative swaps	12	38
Options-fixed income	1_	1_
Total	\$192	\$430

¹ For FY 2019, where a legally enforceable master netting agreement exists, amounts for "Receivables, net – Derivative Contracts" and "Payables, net – Derivative Contracts" will include net of cash collateral deposited for non-exchange traded derivatives which are subject to master netting agreements. Collateral deposits payable are \$19 million (\$32 million gross collateral deposits payable less \$13 million due to a netting of collateral deposits receivable and payable).

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.

² For FY 2018, where a legally enforceable master netting agreement exists, amounts for "Receivables, net – Derivative Contracts" and "Payables, net – Derivative Contracts" will include net of cash collateral deposited for non-exchange traded derivatives which are subject to master netting agreements. Collateral deposits payable are \$40 million (\$49 million gross collateral deposits payable less \$9 million due to a netting of collateral deposits receivable and payable).

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. PBGC'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 include 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.

FAIR VALUE MEASUREMENTS ON A RECURRING BASIS AS OF SEPTEMBER 30, 2019

(Dollars in millions)	Investment Measured at Net Asset Value (NAV)	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			A = 00=		8 7 40 6
Cash and cash equivalents	\$ -	\$ 507	\$ 5,095	\$ -	\$ 5,602
Securities lending collateral ¹	-	-	4,719	-	4,719
Investments: Fixed maturity securities U.S. Government securities Commercial paper/securities purchased under repurchase	-	-	54,670	-	
agreements Asset backed/Mortgage backed	-	-	251	-	
securities Pooled funds ² Pooled funds fixed maturity	-	9	4,584 0*	-	
at NAV ^{2,3} Corporate bonds and other International securities	4,505	1 3	16,255 	- - -	
Total Fixed Maturity Securities Equity securities: Domestic	4,505	13	84,768 67	8	89,286
International Pooled funds ² Pooled funds equity securities at NAV ^{2,3}	20,037	1,933 36	2 -	- 0*	
Total Equity Securities	20,037	2,163	69	8	22,277
Private equity at NAV ³	379	-	-	-	379
Real estate and real estate investment trusts Real estate and real estate investment	-	1,495	-	8	
trusts at NAV ³ Total Real Estate	1,065 1,065				2,568
Insurance contracts and other Investments	-	0*	-	6	6
Receivables: 4 Derivative contracts ⁵	-	5	243	-	248
Payables: 4 Derivative contracts ⁶	-	160	32	-	192

^{*} Less than \$500,000.

- For securities lending details, please refer to the Securities lending section in Note 3 Investments.
- Pooled funds fixed and Pooled funds equity consists of domestic, international and global/other.
- Gertain investments that are measured at fair value using the net asset value (NAV) per share (or its equivalent) practical expedient have been excluded from fair value hierarchy. See Significant Accounting Policies Note 2.
- Where a legally enforceable master netting agreement exists, amounts for "Receivables, net Derivative Contracts" and "Payables, net Derivative Contracts" will include net of cash collateral deposited for non-exchange traded derivatives which are subject to master netting agreements. Collateral deposits receivable are \$229 million (\$242 million gross collateral deposits receivable less \$13 million due to a netting of collateral deposits receivable and payable). Collateral deposits payable are \$19 million (\$32 million gross collateral deposits payable less \$13 million due to a netting of collateral deposits receivable and payable).
- Derivative contracts receivables are comprised of open receivable trades on futures, swaps, and collateral deposits. See the Derivative Contracts table under Note 4.
- 6 Derivative contracts payables are comprised of open payable trades on futures, swaps, options, and collateral deposits. See the Derivative Contracts table under Note 4.

As of September 30, 2019, 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, 2019

(Dollars in millions)	Fair Value at September 30, 2018	Total Realized and Unrealized Gains (Losses) included in Income	Purchases	Sales	Transfers Into Level 3	Transfers Out of Level 3 ¹	Fair Value at September 30, 2019	Change in Unrealized Gains (Losses) Related to Financial Instruments held at September 30, 2019 ²
Assets:								
Fixed	\$ -	-	-	-	-	-	\$ -	\$ -
Pooled funds (fixed)	\$ -	-	-	ı	-	-	\$ -	\$ -
Domestic/Int'l equity ³	\$1	0*	7	0*	-	0*	\$8	\$0*
Private equity	\$ -	-	-	-	-	-	\$ -	\$ -
Real estate & real estate investment trusts	\$7	0*	1	0*	0*	-	\$8	\$0*
Other	\$7	0*	1	(2)	-	-	\$6	\$0*

^{*} Less than \$500,000

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¹ Certain investments that are measured at fair value using the net asset value (NAV) per share (or its equivalent) practical expedient have been excluded from fair value hierarchy. See Significant Accounting Policies – Note 2.

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

 $^{^{\}rm 3}$ Assets which are not actively traded in the market place.

Pursuant to FASB Accounting Standards Codification Section 820, Fair Value Measurement, Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent); additional disclosures for Investments priced at Net Asset Value are discussed below.

FAIR VALUE MEASUREMENTS OF INVESTMENTS THAT ARE MEASURED AT NET ASSET VALUE PER SHARE (OR ITS EQUIVALENT) AS A PRACTICAL EXPEDIENT FOR THE YEAR ENDED SEPTEMBER 30, 2019

	Net Asset Value (in millions)	Unfunded Commitments ^{1,2}	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
Real estate (a)	\$ 2,568	\$ 59	n/a	n/a
Private equity (b)	379	87	n/a	n/a
Pooled funds (c)	24,587	-	n/a	n/a
Total	\$27,534	<u>\$146</u>		

¹ Unfunded amounts include recallable distributions. A substantial portion of the unfunded commitments is unlikely to be called.

- a. This class includes public and private real estate investments that invest primarily in U.S. commercial real estate and U.S. residential real estate. For the private real estate investments, 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 asset include periodic income payments and the proceeds from the sale of the underlying real estate assets. The underlying real estate assets can generally be held indefinitely from the inception date of the investment. There are no plans to sell PBGC's interest in private real estate fund investments in this class in the secondary market. The public real estate investment is an investment in a unit trust that is intended to match or outperform the return of a REIT index. 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 at least monthly when a per unit value is determined and are based upon the closing per unit net asset value.
- b. This class includes private market investments that invest primarily in U.S. buyout and U.S. venture capital funds. These investments do not generally have redemption provisions. Instead, investments in this class typically make distributions which result from liquidation of the underlying assets of the funds. These distributions 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 or outperform the 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 at least monthly when a per unit value is determined and are based upon the closing per unit net asset value.

² These amounts include unfunded commitments that are measured at 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 PROGRAM¹

September 30, 2019	Sensitivity Factors	Official Factors ²	Sensitivity Factors
	Curve of One-Year Forward	Curve of One-Year Forward	Curve of One-Year Forward
	Rates (Interest Factors) -	Rates (Interest Factors) -	Rates (Interest Factors) -
	Varies Annually from 1.36% in	Varies Annually from 2.36% in	Varies Annually from 3.36%
	year 1 for 30 years, 0.98%	year 1 for 30 years, 1.98%	in year 1 for 30 years, 2.98%
(Dollars in millions)	thereafter)	thereafter)	thereafter)
Single-Employer Program ³	\$126,257	\$112,960	\$102,010
	24.44	aa-	77 400
Multiemployer Program	81,445	67,995	57,190
<i>T</i> 1	************	4400.055	\$4.50.2 00
Total	\$207,702	\$180,955	\$159,200

¹ Level 3 Fair Value Measurements.

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 yield curve of forward rates (interest factors) to measure the PVFB liability. The yield curve is based on a survey of life insurance industry annuity prices obtained through the American Council of Life Insurers (ACLI). Based on the survey information, PBGC derives a yield curve that, together with PBGC's mortality table, will best match the private sector annuity prices from the 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 surveys.

² Actual factors and PVFB amounts calculated for September 30, 2019, fiscal year-end financial statements.

³Gross PVFB liability for trusteed plans prior to the netting of recoveries.

These interest factors were determined to be those needed (given the mortality assumption used), to best match the surveys of annuity prices provided by the ACLI. The yield curve is adjusted to best fit unobserved factors that are reflected in the annuity price surveys 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 discount rates at which, in PBGC's opinion, the liabilities (net of administrative expenses) could be settled in the market at September 30, 2019, 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.

Illustrated in the table below is a September 30, 2018 to September 30, 2019 comparison of the yield curve, shown in spot rate format. Future payments are discounted by the single rate applicable for the future year in which the payment is to be made. For September 30, 2019, the curve starts with an interest factor of 2.36% and changes as the future period for discounting gets longer until year 30 when the factor becomes 1.98% for the remaining years. For September 30, 2018, the curve started with an interest factor of 2.95%, and the interest factor for year 30 and longer was 2.93%.

CURVE OF SPOT RATES FOR SEPTEMBER 30, 2018 AND SEPTEMBER 30, 2019

Period					Period			
(in Years)	09/30/2019	09/30/2018	Change		(in Years)	09/30/2019	09/30/2018	Change
1	2.36%	2.95%	-0.59%		16	2.10%	3.25%	-1.15%
2	2.09%	3.10%	-1.01%		17	2.11%	3.23%	-1.12%
3	2.02%	3.18%	-1.16%		18	2.12%	3.22%	-1.10%
4	2.01%	3.23%	-1.22%		19	2.13%	3.21%	-1.08%
5	2.01%	3.25%	-1.24%		20	2.15%	3.21%	-1.06%
6	2.04%	3.29%	-1.25%		21	2.14%	3.17%	-1.03%
7	2.05%	3.32%	-1.27%		22	2.13%	3.14%	-1.01%
8	2.06%	3.34%	-1.28%		23	2.11%	3.11%	-1.00%
9	2.08%	3.36%	-1.28%		24	2.08%	3.08%	-1.00%
10	2.08%	3.36%	-1.28%		25	2.06%	3.04%	-0.98%
11	2.08%	3.35%	-1.27%		26	2.03%	3.01%	-0.98%
12	2.08%	3.33%	-1.25%		27	2.01%	2.98%	-0.97%
13	2.09%	3.31%	-1.22%		28	1.99%	2.96%	-0.97%
14	2.09%	2.29%	-1.20%		29	1.98%	2.94%	-0.96%
15	2.10%	2.27%	-1.17%		30	1.98%	2.93%	-0.95%
			Ι	ong	ger Periods	1.98%	2.93%	-0.95%

In prior years, PBGC disclosed the one-year forward rates which are derived from the underlying yield curve (shown above). In a forward rate structure, discounting a payment due 25 years in the future requires use of 25 different discount rates, each associated with a one-year period, rather than by discounting over the entire 25-year period using the single discount rate ("spot" rate) associated with year 25. The forward rates disclosed for September 30, 2018 are compared below to the forward rates for September 30, 2019 that correspond to the yield curve shown above. When applied to projected benefit payments (as well as projected multiemployer nonrecoverable future financial assistance as discussed in Note 7), the spot rates and forward rates produce equivalent results. (Forward rates are used in PBGC's present valuation calculations.)

CURVE OF ONE-YEAR FORWARD RATES (INTEREST FACTORS) FOR SEPTEMBER 30, 2018 AND SEPTEMBER 30, 2019

	09/30/2019	09/30/2018	Change			09/30/2019	09/30/2018	Change
Year 1	2.36%	2.95%	-0.59%		Year 16	2.18%	2.97%	-0.79%
Year 2	1.82%	3.24%	-1.42%		Year 17	2.20%	2.97%	-0.77%
Year 3	1.87%	3.36%	-1.49%		Year 18	2.25%	2.99%	-0.74%
Year 4	2.00%	3.37%	-1.37%		Year 19	2.40%	3.06%	-0.66%
Year 5	2.03%	3.36%	-1.33%		Year 20	2.59%	3.15%	-0.56%
Year 6	2.18%	3.49%	-1.31%		Year 21	1.92%	2.52%	-0.60%
Year 7	2.09%	3.48%	-1.39%		Year 22	1.81%	2.46%	-0.65%
Year 8	2.16%	3.45%	-1.29%		Year 23	1.68%	2.39%	-0.71%
Year 9	2.20%	3.52%	-1.32%		Year 24	1.55%	2.31%	-0.76%
Year 10	2.10%	3.43%	-1.33%		Year 25	1.45%	2.23%	-0.78%
Year 11	2.09%	3.23%	-1.14%		Year 26	1.39%	2.18%	-0.79%
Year 12	2.11%	3.13%	-1.02%		Year 27	1.42%	2.22%	-0.80%
Year 13	2.14%	3.04%	-0.90%		Year 28	1.54%	2.34%	-0.80%
Year 14	2.16%	2.99%	-0.83%		Year 29	1.70%	2.50%	-0.80%
Year 15	2.17%	2.97%	-0.80%		Year 30	2.00%	2.77%	-0.77%
			Re	mai	ning Years	1.98%	2.93%	-0.95%

PBGC uses a fully generational mortality projection scale. The mortality tables PBGC used for September 30, 2019 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-2018, respectively. For September 30, 2018, PBGC used the same tables projected generationally with the Male and Female Scale MP-2017, respectively.

In FY 2019, PBGC updated the expense reserve factor for administrative expenses. In FY 2019, the expense reserve factor for administrative expenses is 0.68 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. For September 30, 2018, the expense reserve factor was 1.37 percent.

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 2019 and FY 2018 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, 2019, and for the fiscal year ended September 30, 2018.

RECONCILIATION OF THE PRESENT VALUE OF FUTURE BENEFITS FOR THE YEARS ENDED SEPTEMBER 30, 2019 AND 2018

	September 30,				
(Dollars in millions)	2019			2018	
Present value of future benefits, at beginning					
of year Single-Employer, net		\$101,866		\$111,280	
Estimated recoveries, prior year		214		278	
Assets of terminated plans pending trusteeship, net, prior year		215		36	
Present value of future benefits at beginning of year, gross		102,295		111,594	
Settlements and judgments, prior year		(18)		(18)	
Net claims for probable terminations, prior year		(1,799)		(3,242)	
Actuarial adjustments underwriting:					
Changes in method and assumptions	(331)		(400)		
Effect of experience	(480)	_	(127)		
Total actuarial adjustments underwriting	(811)		(527)		
Actuarial charges financial:					
Expected interest	2,950		1,668		
Change in interest factors	12,270	_	(7,608)		
Total actuarial charges financial	15,220		(5,940)		
Total actuarial charges, current year		14,409		(6,467)	
Terminations:					
Current year	4,627		4,396		
Changes in prior year	(60)	_	7	_	
Total terminations		4,567		4,403	
Benefit payments, current year ¹		(6,020)		(5,792)	
Estimated recoveries, current year		(146)		(214)	
Assets of terminated plans pending trusteeship, net, current year		(378)		(215)	
Settlements and judgments, current year ²		17		18	
Net claims for probable terminations:					
Future benefits ³	173		4,185		
Estimated plan assets and recoveries from sponsors		_	(2,386)		
Total net claims, current year		173		1,799	
Present value of future benefits,					
at end of year Single-Employer, net		113,100		101,866	
Present value of future benefits,					
at end of year Multiemployer		0*		0*	
Total present value of future benefits, at end of year, net		\$113,100		\$101,866	

^{*} Less than \$500,000 (actual amount is \$75,606 and \$85,920 for the 10 Pre-MPPAA (Multiemployer Pension Plan Amendments Act) trusteed multiemployer plans at September 30, 2019, and September 30, 2018, respectively).

¹ The benefit payments of \$6,020 million at September 30, 2019, and \$5,792 million at September 30, 2018, include \$60 million in FY 2019 and \$35 million in FY 2018, 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 \$17 million at September 30, 2019, and \$18 million at September 30, 2018.

³ The future benefits for probable terminations of \$173 million and \$4,185 million for the periods ending September 30, 2019, and September 30, 2018, include \$173 million and \$164 million, respectively, for probable terminations not specifically identified, \$0 million and \$4,021 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

	Septemb	September 30, 2019		
	Basis	Basis Market		Market
(Dollars in millions)		Value		Value
U.S. Government securities	\$ -	\$ -	\$1	\$1
Corporate and other bonds	183	182	95	94
Equity securities	205	205	124	124
Private equity	-	-	-	-
Insurance contracts	-	-	-	-
Other	(9)	(9)	(3)	(3)
Total, net	\$379	\$378	\$217	\$216

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, 2019, Net Claims for Probable Terminations is \$173 million, of which all 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)	20	019	201	18
Net claims for probable terminations, at beginning of year		\$ 1,799		\$ 3,242
New claims	-		-	
Actual terminations	(1,635)		(682)	
Deleted probables	-		-	
Change in benefit liabilities	9		(939)	
Change in plan assets	-		178	
Loss (credit) on probables		(1,626)		(1,443)
Net claims for probable terminations, at end of year		\$ 173		\$1,799

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

PROBABLES EXPOSURE BY INDUSTRY (PRINCIPAL CATEGORIES)

(Dollars in millions)	FY 2019	FY 2018
Retail	\$ -	\$1,635
Manufacturing	-	-
Forest Product	-	-
Total ^{1,2}	\$ -	\$1,635

¹ Total excludes a small unidentified bulk reserve of \$173 million and \$164 million for September 30, 2019 and September 30, 2018, respectively.

For further detail regarding single-employer probables, see Note 2 under Present Value of Future Benefits (PVFB) subpoint (4) on pages 60-61.

The following table shows what has happened to plans classified as probable. 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 Pa	robables from 1	1987-2018 at Septen	nber 30, 2019
Beginning in 1987, number of plans reported as Probable:	Number of Plans	Percent of Plans	Net Claim	Percent of Net Claim
Probables terminated	387	79%	\$34,173	74%
Probables not yet terminated or deleted	-	0%	-	0%
Probables deleted	103	21%	12,032	26%
Total	490	100%	\$46,205	100%

² For fiscal year ended September 30, 2019, PBGC did not have any specifically identified single-employer plans classified as probable in inventory

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, 2019	September 30, 2018
Gross balance at beginning of year	\$1,335	\$1,180
Financial assistance payments	160	153
Financial assistance - premiums waived	2	3
Write-offs related to settlement agreements	*	(1)
Subtotal	1,497	1,335
Allowance for uncollectible amounts	(1,497)	(1,335)
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 to identify probable losses, the reserve for small ongoing plans (fewer than 2,500 participants) uses an aggregate method to estimate liability and exposure based on the use of seven years of plan termination history to project the current probable liability.

For medium-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 and then calculates projected dates of insolvency for these plans 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 do not affect the determination of the nonrecoverable future financial assistance liability until approval has been granted and Treasury has issued the final authorization to suspend benefits. In the case of a benefit suspension application, the plan is no longer classified as probable once Treasury has issued the final authorization to suspend benefits. In the case of a partition application, the original plan is no longer classified as probable once PBGC has approved the application and Treasury has issued the final authorization to suspend benefits.

As of September 30, 2019, the Corporation expects that 191 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 191 plans is \$67,995 million (inclusive of the reserve for small ongoing plan losses not individually identified). The 191 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: Plans that have terminated but have not yet started receiving financial assistance 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: Ongoing plans 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, 2019		September 30, 2018	
(Dollars in millions)	Number of Plans	Net Liability	Number Of Plans	Net Liability
Plans currently receiving financial assistance	85 ¹	\$2,807	78	\$2,394
Plans that have terminated but have not yet started receiving financial assistance (classified as probable)	65 ²	1,955	64	1,652
Ongoing plans (not terminated) that the Corporation expects will require financial assistance in the future (classified as probable)	41 ³	63,233 ⁴	42	52,107 4
Total	191	\$67,995	184	\$56,153

¹ Four plans transferred from remote to "Plans currently receiving financial assistance", three plans transferred from "Terminated but have not yet started receiving financial assistance" to "Plans currently receiving financial assistance", one plan transferred from "Ongoing plans" to "Plans currently receiving financial assistance, and one plan was removed from inventory.

Of the 191 plans:

- a) 85 have exhausted plan assets and are currently receiving financial assistance payments from PBGC. The present value of future financial assistance payments for these insolvent 85 plans is \$2,807 million.
- b) 65 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

² Six plans transferred from remote to "Terminated but have not yet started receiving financial assistance", two plans were removed from inventory, and three plans transferred to "Plans currently receiving financial assistance".

³ Five plans transferred from "Reasonably Possible" to "Ongoing plans", five plans were removed from inventory, and one plan transferred to "Plans currently receiving financial assistance".

^{4 &}quot;Ongoing plans" include a small unidentified probable bulk reserve of \$1,149 million and \$1,014 million for September 30, 2019, and September 30, 2018, respectively.

- 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 65 terminated plans is \$1,955 million.
- c) 41 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 41 ongoing plans is \$63,233 million.

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

(Dollars in millions)	September 30, 2019	September 30, 2018
2 oran v vi minorio)	2017	2010
Balance at beginning of year	\$56,153	\$67,283
Changes in allowance:		
Losses (credits) from insolvent and probable plans - financial assistance	11,662	(10,830)
Actuarial adjustments	(31)	(22)
Actuarial charges (credits) - Insolvent plans:		
Due to expected interest	74	40
Due to change in interest factors	297	(165)
Financial assistance granted		
(previously accrued)	(160)	(153)
Balance at end of period	\$67,995	\$56,153

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. PBGC uses a curve of one-year forward rates (interest factors) to value Multiemployer Financial Assistance. See Note 6 on page 83 for the table of interest factors used.

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

	September 30,	September 30,
(Dollars in millions)	2019	2018
Annual leave	\$10	\$10
Other payables and accrued expenses	79_	65
Accounts payable and accrued expenses	\$89	\$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 accordance with the FASB Accounting Standards Codification Section 450, *Contingencies*, PBGC classified a number of companies that sponsor plans with total unfunded vested benefits \$50 million or more 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 available about the companies as of September 30, 2019. PBGC's 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, 2018. The reasonably possible exposure to loss was \$154,673 million for FY 2019. This is a decrease of \$20,766 million from the reasonably possible exposure of \$175,439 million in FY 2018. This decrease is primarily due to the increase in the interest factors used for valuing liabilities and the decline in the number of companies with lower than investment grade bond ratings and/or credit scores that therefore are classified as reasonably possible.

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, 2017. PBGC adjusted the value reported for liabilities to December 31, 2018, using a select rate of 3.05% for the first 20 years and 3.04% thereafter and applying the expense load as defined in 29 CFR Part 4044, Appendix C. (Note that the aforementioned rates are unique and used for the reasonably possible exposure which are derived over a different time frame than the interest factors presented in "Note 6: Present Value of Future Benefits"). The rates were derived in conjunction with the 1994 Group Annuity Mortality Static Table (with margins) projected to 2028 using Scale AA to approximate annuity prices as of December 31, 2018. The underfunding associated with these plans could be substantially different at September 30, 2019, because of changes in economic conditions between December 31, 2018, and September 30, 2019. PBGC did not adjust the estimate for events that occurred between December 31, 2018, and September 30, 2019.

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 2019	FY 2018
Manufacturing	\$57,706	\$66,802
Transportation, Communication and Utilities	41,699	46,203
Services	26,027	25,489
Wholesale and Retail Trade	10,922	9,801
Health Care	7,625	11,187
Finance, Insurance, and Real Estate	5,380	8,409
Agriculture, Mining, and Construction	5,314	7,548
Total	\$154,673	\$175,439

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 that PBGC estimated may require future financial assistance. In addition, PBGC estimated as of September 30, 2019, that it is reasonably possible that other multiemployer plans may require future financial assistance in the amount of \$10,871 million. Reasonably possible multiemployer classification is defined as an ongoing plan with a projected insolvency date between 10 and 20 years from the valuation date.

PBGC calculated the future financial assistance liability for each multiemployer plan identified as probable (see Note 7), or reasonably possible. PBGC used a formula to calculate 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, 2019, or the projected (or actual, if known) date of plan insolvency, discounted back to September 30, 2019. 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.

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 for small plans is derived by subtracting the probable liability for small plans from the total exposure for high-risk small plans. For medium-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 and then calculates projected dates of insolvency for these plans to measure the reasonably possible exposure.

NOTE 10: COMMITMENTS

PBGC's lease commitments for its office and field benefit administrators' facilities total \$364.3 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, 2019, are:

COMMITMENTS: FUTURE LEASE PAYMENTS

(Dollars in millions)	
Years Ending	Operating
September 30,	Leases
2020	\$ 15.3
2021	15.3
2022	27.5
2023	23.1
2024	22.7
Thereafter	260.4
Minimum lease payments	\$ 364.3

In addition to the committed minimum operating lease payments of \$364.3 million as noted in the table above, PBGC has estimated future uncommitted operating leases of \$2.0 million.

Lease expenses were \$17.1 million in FY 2019 and \$20.2 million in FY 2018.

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 2019, the per-participant flat rate premium was \$80 for single-employer pension plans and \$29 for multiemployer plans. For plan years 2018 and 2017, the per-participant flat rate

premiums for single-employer pension plans were \$74 and \$69, respectively, and for multiemployer plans, \$28 for both years, respectively.

Single-employer plans also owe a variable rate premium (VRP) tied to the amount of underfunding. For plan years beginning in 2019, the VRP rate was \$43 per \$1,000 of unfunded vested benefits subject to an overall cap of \$541 per participant. For plan years 2018 and 2017, the VRP rates were \$38 and \$34, 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 single-employer 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 2019 was \$6,662 million and consisted of \$4,488 million in variable rate premiums, \$2,194 million in flat rate premiums, \$4 million in termination premiums, and \$4 million in interest and penalty income, offset by a bad debt expense of \$28 million. Bad debt expenses include a reserve for uncollectible premium receivables (including flat, variable, termination premiums, and insolvent multiemployer plans), interest, and penalties.

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 insolvent multiemployer plans), interest, and penalties.

The following table shows the premium rates for 2017 through 2019:

PREMIUM RATES FOR SINGLE-EMPLOYER AND MULTIEMPLOYER PLANS

		Multiemployer Plans			
	Flat Rate Premium	Variable Ra	Variable Rate Premium		
Plan Years Beginning in	Rate Per Participant	Rate per \$1,000 UVBs	Per Participant Cap	Flat Rate Premium Rate Per Participant	
2019	\$80	\$43	\$541	\$29	
2018	\$74	\$38	\$523	\$28	
2017	\$69	\$34	\$517	\$28	

Premium income is accrued for months in which a plan year overlaps the fiscal year. Because of this rule, premiums for 2017, 2018, and 2019 plan years are accrued in FY 2019, and premium rates change each calendar year, so three sets of premium rates were used to calculate FY 2019 premium revenue.

For example, consider a plan with a September 1, 2018 to August 31, 2019 plan year. Only the first month of that plan year occurs during FY 2018, so 1/12 of the plan's premium was accrued in FY 2018 and 11/12 accrued in FY 2019. Similarly, for a plan with a December 1, 2017 to November 30, 2018 plan year, the last two months of that plan year occur during FY 2019, so 2/12 of the plan's premium income was accrued in FY 2019 and 10/12 was accrued in FY 2018.

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

Net Premiums Receivable

	Single-Employer		Multier	nployer	Memorandum	
						otal
	Sept. 30,	Sept. 30,	Sept. 30,	Sept. 30,	Sept. 30,	Sept. 30,
(Dollars in Million)	2019	2018	2019	2018	2019	2018
Premiums Not Yet Due:						
Estimated Flat-Rate Premiums	\$1,124	\$1,123	\$173	\$152	\$1,297	\$1,275
Estimated Variable-Rate Premiums	2,995	2,262	_	_	2,995	2,262
Total Net Premiums Not Yet Due	4,119	3,385	173	152	4,292	3,537
Premiums Past Due:						
Flat-Rate Premiums	149	92	8	20	157	112
Allowance for Bad Debt-Flat-Rate	(3)	(1)	0 :	* 0 :	* (3)	(1)
Variable-Rate Premiums	244	102	-	-	244	102
Allowance for Bad Debt-Variable-Rate	(5)	(1)			(5)	(1)
Total Net Premiums Past Due	385	192	8	20	393	212
Termination Premiums: ¹						
Termination Premiums	305	303	-	_	305	303
Allowance for Bad Debt-Termination	(296)	(282)	-	-	(296)	(282)
	9	21	-	-	9	21
Interest and Penalty:						
Interest and Penalty Due	3	2	0 :	* 0 :	* 3	2
Allowance for Bad Debt-Int/Penalty	(1)	0 *	0 :	* 0	*(1)	0 *
Total Net Interest and Penalty Due	2	2	0 :	* 0 3	* 2	2
Grand Total Net Premiums Receivable	\$4,515	\$3,600	\$181	\$172	\$4,696	\$3,772

^{*} 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 receive 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, 2019	September 30, 2018
Flat-Rate Premium:		
Single-Employer	\$1,882	\$1,804
Multiemployer	312	295
Total Flat-Rate Premium	2,194	2,099
Variable-Rate Premiums	4,488	3,702
Interest and Penalty Income	4	2
Termination Premium	4	54
Less Bad Debts for Premiums, Interest, and Penalties	(28)	(47)_

^{*} Less than \$500,000

PREMIUM INCOME BY PROGRAM

(Dollars in Million)	September 30, 2019	September 30, 2018
Single-Employer:		
Flat-Rate and Variable-Rate Premiums	\$6,370	\$5,506
Interest and Penalty Income	4	2
Termination Premiums	4	54
Less Bad Debts for Premiums, Interest, and Penalties	(26)	(44)
Total Single-Employer	6,352	5,518
Multiemployer:		
Flat-Rate Premiums	312	295
Interest and Penalty Income	0 *	0 *

^{*} Less than \$500,000

NOTE 12: LOSSES (CREDITS) 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 (CREDITS) FROM COMPLETED AND PROBABLE TERMINATIONS – SINGLE-EMPLOYER PROGRAM

	For the Years Ended September 30,					
		2019			2018	
		Changes in			Changes in	
	New	Prior Years'	Total	New	Prior Years'	Total
(Dollars in millions)	Terminations	Terminations ⁶		Terminations	Terminations ⁶	
Present value of future	\$4,614	(\$59)	\$4,555	\$4,419	\$ 7	\$4,426
benefits	φτ,01τ	(ψ39)	Ψ+,555	φ+,+17	4 /	φ4,420
Less plan assets	3,060	121	3,181	3,128	107	3,235
Plan asset insufficiency	1,554 ¹	(180)	1,374	1,291	(100)	1,191
Less estimated recoveries	-	(61)	(61)	-	(57)	(57)
Subtotal	1,554 ²	(119)	1,435	1,2912	(43)	1,248
Settlements and judgments		0* ⁷	0*7		17	17
Loss (credit) on probables	$(1,354)^3$	104	$(1,344)^5$	(682)	(889)4	$(1,571)^5$
Total	\$ 200	(\$109)	\$91	\$609	(\$931)	(\$322)

^{*} Less than \$500,000

¹ Includes Missing Participant activity; if excluded the Present value of future benefits for New Terminations would be \$4,584 million, Plan assets \$3,030 million and Plan asset insufficiency \$1,554 million.

²Net claim for plans terminated during the period (47 plans at September 30, 2019 and 64 plans at September 30, 2018). including plans previously recorded as probables which have since terminated.

³Net claims for plans previously recorded as probables that terminated (Sears Holdings – two plans).

⁴Includes deleted probables and changes to old and new probables.

⁵ See Note 6 - includes \$1,354 million at September 30, 2019, and \$682 million at September 30, 2018, previously recorded relating to plans that terminated during the period ("Actual terminations").

⁶ 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.

⁷ 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 PBGC's future Page/Collins settlement liability is \$17 million at September 30, 2019, and \$18 million at September 30, 2018.

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, 2019	Multiemployer Program Sept. 30, 2019	Memorandum Total Sept. 30, 2019	Single-Employer Program Sept. 30, 2018	Multiemployer Program Sept. 30, 2018	Memorandum Total Sept. 30, 2018
Fixed maturity securities	:					
Interest earned	\$2,629	\$68	\$2,697	\$2,343	\$62	\$2,405
Realized gain (loss)	3,808	101	3,909	(1,146)	(71)	(1,217)
Unrealized gain (loss)	7,913	273	8,186	(2,629)	(43)	(2,672)
Total fixed maturity						
securities	14,350	442	14,792	(1,432)	(52)	(1,484)
Equity searities:						
Dividends earned	122	-	122	102	-	102
Realized gain (loss)	1,636	-	1,636	1,228	-	1,228
Unrealized gain (loss)	(1,697)		(1,697)	1,403		1,403
Total equity securities	61		61	2,733		2,733
Private equity:						
Distributions earned	0 *	-	0 ;	* 2	-	2
Realized gain (loss)	103	-	103	138	-	138
Unrealized gain (loss)	(86)		(86)	(47)		(47)
Total private equity	17		17	93		93
Real estate:						
Distributions earned	0 *	-	0 ;	* 0 *	-	0 *
Realized gain (loss)	444	-	444	19	-	19
Unrealized gain (loss)	(58)		(58)	86		86
Total real estate	386		386	105		105
Other income:						
Distributions earned	6	-	6	4	-	4
Realized gain (loss)	0 *	-		* (1)	_	(1)
Unrealized gain (loss)	*			**		
Total other income	6		6	3		3
Total investment incom	e \$14,820	\$442	\$15,262	\$1,502	(\$52)	\$1,45 0

^{*}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 2019 and FY 2018. 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 magnitude and investment composition 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)

	Septeml	per 30,
(Dollars in millions)	2019	2018
Proceeds from sales of investments:		
Fixed maturity securities	\$122,569	\$108,910
Equity securities	8,853	7,072
Other/uncategorized	6,565	5,104
Memorandum total	\$137,987	\$121,086
Payments for purchases of investments:		
Fixed maturity securities	(\$129,940)	(\$117,693)
Equity securities	(6,329)	(2,673)
Other/uncategorized	(4,116)_	(3,620)
Memorandum total	(\$140,385)	(\$123,986)

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-E	Employer	Multiem	ployer	Memora	andum
	Program September 30,		Prog	ram	Total	
			September 30,		September 30,	
(Dollars in millions)	2019	2018	2019	2018	2019	2018
Net income (loss)	\$6,217	\$13,353	(\$11,290)	\$11,176	(\$5,073)	\$24,529
Adjustments to reconcile net income to net cash	φ0,217	φ15,555	(\$11,290)	φ11,170	(\$3,073)	\$24,327
provided by operating activities:						
Net (appreciation) decline in fair value of						
investments	(12,029)	1,005	(360)	126	(12,389)	1,131
Net (gain) loss of plans pending termination and	(, ,	,	()		() ,	,
trusteeship	(5)	(6)	_	-	(5)	(6)
Losses (credits) on completed	· /	()			()	· /
and probable terminations	91	(322)	_	-	91	(322)
Actuarial charges (credits)	14,409	(6,468)	_	-	14,409	(6,468)
Benefit payments - trusteed plans	(5,960)	(5,757)	-	_	(5,960)	(5,757)
Settlements and judgments	(1)	(2)	-	-	(1)	(2)
Cash received from plans upon trusteeship	385	33	-	-	385	33
Receipts from sponsors/non-sponsors	(115)	579	-	_	(115)	579
EL/DUEC Trusteeship interest (non-cash)	(45)	(36)	-	_	(45)	(36)
Cash receipts timing from Trust to Revolving	-	-	-	_	-	-
Amortization of discounts/premiums	47	59	4	4	51	63
Amortization and Depreciation expense	11	13	-	-	11	13
Bad debt expense/Write-offs (net)	14	6	-	-	14	6
Changes in assets and liabilities, net of effects						
of trusteed and pending plans:						
(Increase) decrease in receivables	(927)	687	(8)	(1)	(935)	686
Increase in present value of						
nonrecoverable future financial assistance	-	-	11,842	(11,130)	11,842	(11,130)
Increase (decrease) in unearned premiums	51	(96)	(5)	3	46	(93)
Increase (decrease) in accounts payable	14	<u>-</u>			14	
Net cash provided (used) by operating activities	\$2,157	\$3,048	\$183	\$178	\$2,340	\$3,226

NOTE 16: LITIGATION

Legal challenges to PBGC's policies and positions continued in FY 2019. At the end of the fiscal year, PBGC had 21 active cases in state and federal courts and 165 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

PBGC evaluated subsequent events through publication on November 15, 2019, 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, 2019, and before the financial statements were available to be issued, that provided additional evidence about conditions that existed at September 30, 2019, have been recognized in the financial statements.

For the fiscal year ended September 30, 2019, 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, 2019, 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. 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 2019 IMPROPER PAYMENT RISK ASSESSMENT

In FY 2019, PBGC performed a risk assessment of two payment streams in accordance with our three-year rotation strategy. The two payment streams reviewed for FY 2019 include Payments to Contractors and Financial Assistance Payments. 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 Payments to

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).

Contractors and Financial Assistance Payments 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's 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.
- 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 2019:

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	15,180	\$6,603,358

• 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 2019, 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.

2019 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 2018 for the Single-Employer and Multiemployer Programs.

PRESENT VALUE OF FUTURE BENEFITS AND NONRECOVERABLE FINANCIAL ASSISTANCE – 2019

		Number of	Number of	
		Plans	Participants	Liability
			(in thousands)	(in millions)
I.	SINGLE-EMPLOYER PROGRAM			
	A. Terminated Plans			
	1. Seriatim at fiscal year-end (FYE)	4,478	998	\$75,934
	2. Seriatim at DOPT, adjusted to FYE	128	216	22,779
	3. Nonserieatim ¹	359	217	14,623
	4. Missing Participants Program (seriatim) ²		28	116
	Subtotal	4,965	1,459	\$113,452
	B. Probable terminations (nonseriatim) ³			<u> 173</u>
	Total ⁴	4,965	1,459	\$113,625
II.	MULTIEMPLOYER PROGRAM			
	A. Pre-MPPAA terminations (seriatim)	10	0*	\$0**
	B. Pre-MPPAA liability (net of plan assets)			
	1. Currently Receiving Assistance	85	96	2,807
	2. Probable for Assistance	<u> 106</u>	<u>1,193</u>	65,188
	Total	201	1,289	\$67,995

^{*} Fewer than 500 participants

Notes:

- 1) Liability for terminated plans includes an estimated liability of \$17 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 \$173 million for not-yet-identified probable terminations.
- 4) The PVFB in the financial statements (\$113,100 million) is net of estimated recoveries on terminated plans (\$147 million), and estimated assets for plans pending trusteeship (\$378 million), or, \$113,625 million less \$0 less \$147 million less \$378 million = \$113,100 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 4,478 plans, representing about 90 percent of the total number of single-employer terminated plans (68 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 149 plans over the 4,329 plans valued seriatim last year. For 128 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 2019 on a nonseriatim basis.

^{**} Less than \$500,000

For 359 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 2019 actuarial valuation, PBGC used a curve of one-year forward rates (interest factors) which varies annually from 2.36% in year 1 to 1.98% in year 31 and beyond. In fiscal year 2018, we used a curve of one-year forward rates (interest factors) which varies annually from 2.95% in year 1 to 2.93% 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-2018. In fiscal year 2018, we used the same mortality tables, except with each table projected generationally using Scale MP-2017.

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 191 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, 2019.

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 V aluation Actuary
Pension Benefit Guaranty Corporation
Director, Actuarial Services and Technology Department

INDEPENDENT AUDIT	AND MANAGEMENT'S RESPONSE



November 15, 2019

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, 2019 and 2018. 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. 19-03, "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, 2019 and 2018, 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 27th consecutive
 unmodified financial statement audit opinion.
- PBGC maintained, in all material respects, effective internal control over financial reporting as of September 30, 2019, 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). As of September 30, 2019, PBGC has two significant deficiencies: (1) Controls over the Actuarial Estimates and (2) Access Controls and Configuration Management.

Board of Directors November 15, 2019 Page 2

> An instance of potential noncompliance or other matters that are required to be reported in accordance with Government Auditing Standards. Specifically, in prior years CLA reported that PBGC did not record its full contractual obligation under all of its multiyear lease arrangements in potential violation of the Antideficiency Act. In FY 2019, PBGC submitted draft letters to the Office of Management and Budget (OMB) to report the violations. PBGC is awaiting finalization of OMB's review prior to report the violations to the President, the Congress, and the Comptroller General as required.

CLA is responsible for the accompanying auditor's report dated November 15, 2019 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-2020-2/FA-19-137-1) is also available on our website at oig.pbgc.gov.

Respectfully,

Robert A. Westbrooks

Robert A. Westbrooks Inspector General

cc: Gordon Hartogensis
Patricia Kelly
Alice Maroni
Kristin Chapman
David Foley
Karen Morris
Andy Banducci
Robert Scherer
Judith Starr
Theodore Winter
Frank Pace



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, 2019 and 2018, 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. 19-03, *Audit Requirements for Federal Financial Statements* (OMB Bulletin 19-03). Those standards and OMB Bulletin 19-03 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, 2019 and 2018, 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, 2019, PBGC reported in its financial statements a net surplus position (assets in excess of liabilities) of approximately \$8.7 billion in the Single-Employer Program Fund and a deficit net position (liabilities excess assets) in the Multiemployer Program Fund of approximately \$65 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 \$155 billion and \$11 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, 2017, and adjusted the value reported for liabilities to the estimated balance as of December 31, 2018, using actuarial assumptions. PBGC did not adjust the estimate for economic conditions that occurred between December 31, 2018 and September 30, 2019, and as a result, the actual loss for the Single-Employer Program as of September 30, 2019 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 the Multiemployer program at present does not have the resources 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) 2019 Financial Statement Highlights, Management's Discussion and Analysis, Analysis of Entity's Systems, Controls and Legal Compliance, Management Representation, Improper Payment Reporting, 2019 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, 2019, 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, 2019, 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 Actuarial Estimates
- 2. 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, we reported that PBGC did not record its full contractual obligation under all of its multiyear lease arrangements. These instances were reported as a potential violation. In FY 2017, PBGC's General Counsel reported the violation over its headquarters leases to the Office of Management and Budget (OMB). In FY 2019, PBGC received revisions from OMB regarding the draft letters detailing the violations that occurred in FYs 2004 and 2005. PBGC is currently waiting on the letters to complete the final clearance process at OMB in order to report the violations to the President, the Congress, and the Comptroller General in accordance with OMB A-11 Section 145.7.

 PBGC restructured its six operating leases for the Field Benefit Administrator (FBA) office locations in response to the reported prior year potential violations. PBGC has enacted corrective actions to prevent future violations, such as the required use of supplemental lease agreements in order to exercise funding options.

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, 2018. The status of prior year findings is presented in Exhibit III.

CliftonLarsonAllen LLP

Greenbelt, Maryland November 15, 2019

lifton Larson Allen LLP

BACKGROUND

PBGC protects the pensions of over 35 million workers and retirees in over 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 2019, 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 continues to implement certain corrective actions to enhance the valuation tool used to calculate its single largest liability and implement IT solutions to mitigate system weaknesses. Although PBGC made incremental progress in these areas, the Corporation should continue to focus its efforts resolving the remaining outstanding conditions described below.

1. Controls over the Actuarial Estimates

The PBGC actuarial estimated liability includes the Present Value of Future Benefits (PVFB) and the Present Value of Nonrecoverable Future Financial Assistance (PV NRFFA). The PVFB 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. 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 on the projected date of insolvency.

The accuracy of the actuarial estimates is highly dependent on assumptions used and the completeness of the underlying data provided to the actuaries for input into the actuarial models. PBGC's actuarial estimates are complex and the assumptions used are inherently risky as they rely on management's judgement. While such risks are assessed more on the basis of reasonableness rather than exactness, the Corporation must still aim to obtain the highest level of precision in estimating these liabilities. Further, the availability and reliability of relevant data, the number and significance of assumptions that are made, and the degree of uncertainty associated with the assumptions are some examples that pose risk on the accuracy of the PVFB and NRFFA estimated liabilities.

A. PVFB

The Office of Benefits Administration (OBA) continues to implement best practices to mitigate risks associated with the valuing the PVFB liability. Most recently, these practices include the update to certain actuarial assumptions and other system enhancements to the Integrated

Present Value of Future Benefit (IPVFB) valuation tool. The continuance of management's improvement in the design and execution of controls over the PVFB liability should aid in its efforts to reduce financial reporting risk. Through FY 2019, issues with the PBGC's Individual Participant Valuation (IPV) continue to exist in the following areas:

Calculation of the PVFB

During FY 2019, we found errors in the calculation of participant benefits and the related PVFB liability. We tested the PVFB liability reported at June 30 and September 30 and our results continue to reveal:

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

Despite enhancements to the automated tool used to calculate the PVFB, we continue to observe a significant error rate in the detailed IPV testing, which has on average exceeded 20% of the samples tested. The consistently high error rate exposes the Corporation to the risk that a material misstatement to the financial statements could occur.

Actuarial Assumptions

Actuarial assumptions are estimates of an uncertain variable input and are key factors needed to estimate PBGC's PVFB. Further, the actuarial-measured liabilities are significant to PBGC's financial statements and are an integral part of an organization's risk management practices. Management is responsible for assessing the actuarial assumptions used for During our June 30th internal control testing, we identified control deficiencies related to the PBGC's actuarial liability estimates. These deficiencies are listed as follows:

- Several assumptions and experience studies (e.g., interest rates, withdrawal liability payment, quarantee-factor determination, default attained ages, mortality, retirement age for deferred participants past expected retirement age) have not been updated for several years. PBGC management may not be using the most up-to-date and relevant assumptions.
- PBGC management did not assess the estimation of uncertainty by performing specific analysis such as a sensitivity analysis or other similar method for the assumptions used.
- PBGC management did not consider a measurable threshold (e.g., dollar amounts, percentage) to assess the reasonableness of the assumptions used to estimate the PVFB liability. The current process is subjective and relies on the actuary's judgement.
- PBGC management did not perform analyses benchmarking the assumptions used and the results to other relevant reports and/or studies to assess reasonableness. According to management, such analyses are not applicable due to the unique nature of PBGC's actuarial liability. However, management did not provide evidence to support to their position.
- Management did not document its rationale or provide adequate support for certain judgements used in developing the actuarial estimates.

B. PV NRFFA

The contingency classification of the PV NRFFA multiemployer plans encompasses two approaches based on the status of the plan. The status of these plans are categorized as terminated or on-going plan. A liability is recognized for all terminated plans. In addition, PBGC management recognized a liability for all on-going plans based on a projected Date of Insolvency (DOI) within 10 years of the PBGC financial statement closing date. During our examination of the multiemployer program liabilities and related disclosures, we found control deficiencies related to PBGC's recording and classification of the multiemployer program liability based on its classification criteria. These deficiencies are specific to management's review and monitoring activities.

1. PBGC management could not provide sufficient documentation to support the criteria for recording certain plans as probable based on a 10 year DOI. Further, PBGC management has not conducted any in-depth analysis or experience study to determine whether the current 10 year DOI is supported by any recent or long-term trends. The DOI is the key driver in determining whether a plan should be recorded on PBGC's financial statements. We performed a review of PBGC's FY2008 large probable multiemployer plans listing and identified a total of 10 plans that were classified as probable at 9/30/2008 and not insolvent as of 9/30/2019. These plans were probable for more than 10 years which indicates PBGC's 10 year DOI basis may not be accurate.

At the end of the audit period, PBGC management conducted a limited analysis of the multiemployer liability to support its 10 year DOI basis at year end. However, we found that management's analysis and conclusion did not identify any plans classified as probable more than 10 years and is limited in scope. As previously discussed, the terminated plans are not beholden to the 10 year DOI criteria. However, the probable assessment for terminated plans should be re-evaluated based on similar criteria used for on-going plans.

2. The Multiemployer Working Group (MWG) is responsible for reviewing the projected DOI for classifying the medium and large ongoing plans. We inquired on whether the MWG considered other factors when approving the classification of medium plans. Per management, there were no other specific factors considered, possibly indicating a limited analysis or perspective surrounding the multiemployer criteria.

ASC 450, Contingencies - 450-20-25-1: When a loss contingency exists, the likelihood that the future event or events will confirm the loss or impairment of an asset or the incurrence of a liability can range from probable to remote. As indicated in the definition of contingency, the term loss is used for convenience to include many charges against income that are commonly

¹ Inactive plans that may have assets as of the financial closing date but whose assets plus collectible withdrawal liability payments will be insufficient to cover their non-forfeitable benefit plus expense liability (these plans are operating as wasting trusts that will run out of assets before benefits are paid).

² Active plans that have projected a Date of Insolvency (DOI) within ten years from the ASTD valuation date.

referred to as expenses and others that are commonly referred to as losses. The Contingencies Topic uses the terms probable, reasonably possible, and remote to identify three areas within that range.

Recommendations:

We continue to recommend that PBGC management:

- Conduct the appropriate analyses (such as sensitivity analysis, lookback analysis, benchmarking to other relevant actuary report or studies, as applicable) to ensure the reasonableness of assumptions used, and document the rationale behind these assumptions. Enhance reasonability checks over actuarial assumptions to include specific metrics, such as percentage and dollar amount thresholds. Additionally, management should consider changes in conditions or programs that require further research and analysis, and develop a schedule to update actuarial assumptions when necessary. (OIG **Control FS-19-01)**
- Document management's assessment of the liability estimates and assumptions in the management's actuarial assumptions documents and memos, including consideration of alternative assumptions or outcomes, why management has rejected them or how management has otherwise addressed estimation uncertainty in making the accounting estimate (e.g., a sensitivity study, etc.), sources of data used by management in its calculation, and any data limitations, which could impact the PBGC's actuarial liability. (OIG Control FS-19-02)
- Perform an experience study to assess the reasonableness of the multiemployer contingent liability for on-going and terminated plans. (OIG Control FS-19-03)
- Perform an analysis of all multiemployer plans on the contingency list that have exceeded the 10 year DOI for both terminated and on-going plans and document management's position or rationale for recording as a probable. A similar analysis should be performed for the reasonably possible classified plans. (OIG Control FS-19-04)
- Develop and/or update management's documentation for current practices followed for review and monitoring of the multiemployer DOI of insolvency criteria. (OIG Control FS-19-05)
- Promptly correct the errors in its calculations identified by the auditors during the FY 2019 audit. (OIG Control FS-19-06)
- Review the LTV Steel Hourly plan to determine the impact of the cash balance add-back threshold for those participants affected. (OIG Control FS-19-07)
- Review other similarly situated participants in the Johnson Memorial Hospital plan to determine the impact of the incorrect lump sum factor and make necessary benefit corrections. (OIG Control FS-19-08)
- Review the other three participants in the Seymour Specialty Wire Company Salary plan and make necessary benefit corrections. (OIG Control FS-19-09)

2. Access Controls and Configuration Management

In FY 2019, PBGC continued to focus on resolving its access controls and configuration management weaknesses and continued to implement technologies and processes to address long standing control weaknesses. However, the controls require time to mature and show evidence of their operating effectiveness. In addition, management should continue to enhance processes by eliminating or reducing manual controls related to system access controls. 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 2019. For example, PBGC implemented a dashboard to provide metrics on compliance with configuration and access separation policies 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 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 components³ 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.

³ 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.

- 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.
- Continued implementation of PBGC policy to require System Owners to assess audit logging needs for major applications.
- 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.
- Implementation of requirements for the disposition of dormant accounts for all PBGC systems.
- Ability to assess PBGC's paying agent's system access for appropriateness and compliance with PBGC policy.

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 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 FS-18-10)
- 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 FISMA-15-02)
- System Owners should develop and implement plans to fully implement Splunk Enterprise for their major applications. (OIG Control FS-07-17)
- 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 FS-18-12)

EXHIBIT I

PENSION BENEFIT GUARANTY CORPORATION INTERNAL CONTROL DEFICIENCIES September 30, 2019

- Implement improved processes and provide training to ensure PBGC Workplace Solutions
 Department removes physical access by the effective separation date. (OIG Control FS18-13)
- 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)
- OBA should obtain confirmation of access to server or in the event the access list cannot be shared, PBGC will pursue viable alternatives to include moving PBGC data to a separate server within the paying agent's data center. (OIG Control FS-19-10)
- Conduct an account recertification of Linux users and groups with access to PBGC PLUS data to verify that only authorized users have access and the privileges are appropriate. (OIG Control FS-19-11)

PENSION BENEFIT GUARANTY CORPORATION NONCOMPLIANCE WITH LAWS AND REGULATIONS September 30, 2019

NONCOMPLIANCE WITH THE ANTIDEFICIENCY ACT

Potential Noncompliance

Leases

In June 2017, PBGC reported an Antideficiency Act (ADA) violation to OMB in relation to their multiyear lease agreements for the headquarters locations in Washington DC. These violations occurred because PBGC did not record the full contractual obligation at the commencement of the lease. Over the past two years, PBGC management has sent the required communications to OMB with the intent to finalize the clearance process prior to an official notification to the President and the Congress. This process has not been finalized as of September 30, 2019. PBGC has entered into new multiyear lease arrangements with the General Service Administration for the headquarters locations to mitigate future compliance risks associated with ADA.

PBGC uses multiyear lease arrangements for the FBA office locations throughout the United States. In the prior year we reported that these arrangements were at risk for similar ADA violations. PBGC's Office of General Counsel researched these arrangements and concluded no such violations occurred. PBGC management took corrective action to mitigate future ADA compliance risks for the FBA locations. For example, the new multiyear lease agreements for FBA locations now require the use of supplemental lease agreements (SLAs) to affirmatively confirm the availability of funds with the property management when exercising the contract options. The corrective actions are based on PBGC management's comprehensive review of all current multiyear operating lease arrangements.

PENSION BENEFIT GUARANTY CORPORATION STATUS OF PRIOR YEARS' FINDINGS

	Prior Year Condition	Status as Reported at September 30, 2018 ⁴	Status as of September 30, 2019
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 Using the most current and relevant data to update actuarial assumptions 	Repeated as significant deficiency number 1 with updates and retitled as Controls over Actuarial Estimates. 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 Coding error in IPVFB system 	Partially resolved and included in significant deficiency number 1 retitled as Controls over Actuarial Estimates. 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 2 and included in Exhibit I.

⁴ Audit of the Pension Benefit Guaranty Corporation's Fiscal Year 2018 and 2017 Financial Statements https://oig.pbgc.gov/pdfs/FA-18-127-1.pdf

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.	Partially resolved repeated as a Noncompliance with Antideficiency Act in Exhibit II.

PENSION BENEFIT GUARANTY CORPORATION STATUS OF PRIOR YEARS' FINDINGS

Prior Year Internal Control Report Recommendations Closed During FY 2019	Date Closed	Original Report Number
BD-07	11-14-19	AUD-2018-9/FA-17-119-4
BD-08	11-14-19	AUD-2018-9/FA-17-119-4
FS-16-06	11-12-19	AUD-2017-3/FA-16-110-2
FS 17-01	11-13-19	AUD-2018-6/FA-17-119-3
FS-18-01	11-13-19	AUD-2019-1/FA-18-127-1
FS-18-02	11-13-19	AUD-2019-1/FA-18-127-1
FS-18-03	10-24-19	AUD-2019-1/FA-18-127-1
FS-18-04	10-31-19	AUD-2019-1/FA-18-127-1
FS-18-05	10-28-19	AUD-2019-1/FA-18-127-1
FS-18-06	11-08-19	AUD-2019-1/FA-18-127-1
FS-18-07	11-07-19	AUD-2019-1/FA-18-127-1
FS-18-08	11-07-19	AUD-2019-1/FA-18-127-1
FS-18-11	09-23-19	AUD-2019-1/FA-18-127-1
FISMA-15-01	10-31-19	EVAL 2016-7/FA-15-108-7

PENSION BENEFIT GUARANTY CORPORATION STATUS OF PRIOR YEARS' FINDINGS

Open Recommendations as of September 30, 2019:

Recommendation	Report
Prior Year	
FS-07-14	2008-2/FA-0034-2
FS-07-17	2008-2/FA-0034-2
FS-16-07	AUD-2017-3/FA-16-110-2
FS-16-08	AUD-2017-3/FA-16-110-2
FS-17-05	AUD-2018-6/FA-17-119-3
FS-18-09	AUD-2019-1/FA-18-127-1
FS-18-10	AUD-2019-1/FA-18-127-1
FS-18-12	AUD-2019-1/FA-18-127-1
FS-18-13	AUD-2019-1/FA-18-127-1
FISMA-15-02	EVAL 2016-7/FA-15-108-7
FY Ended September 30, 2019	

PENSION BENEFIT GUARANTY CORPORATION MANAGEMENTS RESPONSE FY2019 INDEPENDENT AUDITOR REPORT SEPTEMBER 30, 2019



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

Office of the Director

NOV 1 5 2019

MEMORANDUM

To:

Robert A. Westbrooks

Inspector General

From:

Gordon Hartogensis

Director

Subject:

Response to the Independent Auditor's Combined Audit Report for the

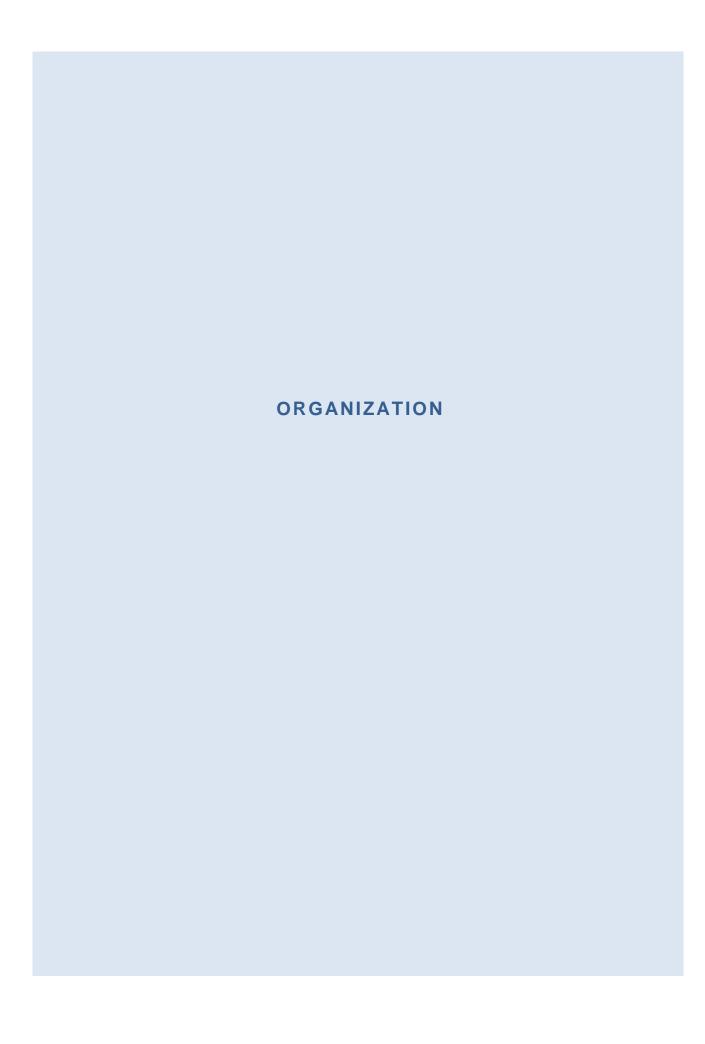
FY 2019 Financial Statement Audit

Thank you, once again this year for the opportunity to comment on the Office of Inspector General's FY 2019 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, as have our internal controls over financial reporting.

We agree with your observations 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
Kristin Chapman
Andy Banducci
David Foley
Alice Maroni
Karen Morris
Ann Orr
Robert Scherer
Judith Starr
Frank Pace
Theodore J. Winter



Board of Directors

Secretary of Labor

Eugene Scalia Chair

Secretary of Commerce

Wilbur L. Ross, Jr.

Secretary of the Treasury

Steven T. Mnuchin

Executive Management

Director

Gordon Hartogensis

Chief of Benefits Administration

David Foley

Chief Financial Officer Patricia Kelly

Chief Information Officer

Robert Scherer

Chief Management Officer

Alice Maroni

Chief of Negotiations and Restructuring

Karen Morris

Chief Policy Officer

Andrew Banducci

Chief of Staff

Kristin Chapman

General Counsel

Judith Starr

Office of Inspector General

Inspector General

Robert A. Westbrooks

Board Representatives

Department of Commerce

Thomas Gilman CFO and Assistant Secretary of Commerce for Administration

Department of Labor

Preston Rutledge Assistant Secretary, Employee Benefits Security Administration

Department of Treasury

Bimal Patel

Assistant Secretary for Financial Institutions

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Bankruptcy, Litigation and Terminations Department

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Kartar Khalsa Deputy General Counsel

Budget Department

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