PBGC
Protecting America's Pensions

OFFICE OF INSPECTOR GENERAL

AUDIT REPORT

Audit of the Pension Benefit Guaranty Corporation's Fiscal Year 2019 and 2018 Financial Statements

Report No. AUD-2020-2
November 15, 2019

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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.

- 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

Audit of the Pension Benefit Guaranty Corporation's

Fiscal Year 2019 and 2018 Financial Statements

Audit Report AUD-2020-2/FA-19-137-1

Section I

Independent Auditors' Report

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CliftonLarsonAllen LLP
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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 in excess of 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

EXHIBIT I

PENSION BENEFIT GUARANTY CORPORATION
INTERNAL CONTROL DEFICIENCIES
September 30, 2019

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 reasonableness. 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, guarantee-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.

PENSION BENEFIT GUARANTY CORPORATION
INTERNAL CONTROL DEFICIENCIES
September 30, 2019

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[1] or on-going plan[2]. 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 referred to as expenses and others that are commonly referred to as losses. The

[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.

Contingencies Topic uses the terms probable, reasonably possible, and remote to identify three areas within that range.

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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 components[3] that can be interconnected in a multitude of arrangements to meet a variety of business, mission and information security needs. How these information system components are networked, configured and managed is critical in providing adequate information security and supporting an organization's risk management process.

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

- Implementation of controls to remedy vulnerabilities identified in key databases and applications, such as weaknesses in configuration, roles, privileges, auditing, file permission, and operating system access.
- Development and implementation of processes and procedures for determining and documenting defined security configuration checklists for database applications.
- Removal and decommission of systems and application software that have reached the end of their service life.
- Development and implementation of a plan of action to address known security weaknesses in accordance with PBGC's timeline for corrective action of vulnerabilities identified in vulnerability scans.
- Modernization of systems and applications to ensure the cryptography implemented is compliant with FIPS 140-2, *Security Requirements for Cryptographic Modules* and OMB A-130, *Managing Information as a Strategic Resource*.

[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 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)**
- Implement improved processes and provide training to ensure PBGC Workplace Solutions Department removes physical access by the effective separation date. **(OIG Control FS-18-13)**
- OBA should document enhanced account management procedures to ensure a thorough review of accounts is performed during the annual account recertification and that necessary accounts are recertified, and implement compensating controls to verify inactive accounts are deactivated in accordance with PBGC policy. **(OIG Control FS-17-05)**

PENSION BENEFIT GUARANTY CORPORATION
INTERNAL CONTROL DEFICIENCIES
September 30, 2019

- 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)**

EXHIBIT II

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.

EXHIBIT III

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 re-titled 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 re-titled 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

EXHIBIT III

PENSION BENEFIT GUARANTY CORPORATION
STATUS OF PRIOR YEARS' FINDINGS

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

EXHIBIT III

PENSION BENEFIT GUARANTY CORPORATION
STATUS OF PRIOR YEARS' FINDINGS

Prior Year Internal Control Report Recommendations Closed During FY 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

EXHIBIT III

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	

EXHIBIT IV

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

PBGC
Protecting America's Pensions
Pension Benefit Guaranty Corporation
1200 K Street, N.W., Washington, D.C. 20005-4026

Office of the Director

NOV 15 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

Audit of the Pension Benefit Guaranty Corporation's

Fiscal Year 2019 and 2018 Financial Statements

Audit Report AUD-2020-2/FA-19-137-1

Section II

Pension Benefit Guaranty Corporation's

Fiscal Year 2019 and 2018 Financial Statements

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PENSION BENEFIT GUARANTY CORPORATION

STATEMENTS OF FINANCIAL POSITION

	Single-Employer Program		Multiemployer Program		Memorandum Total	
	September 30,		September 30,		September 30,	
(Dollars in Millions)	**2019**	2018	**2019**	2018	**2019**	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.

PENSION BENEFIT GUARANTY CORPORATION

STATEMENTS OF FINANCIAL POSITION

	Single-Employer Program		Multiemployer Program		Memorandum Total	
(Dollars in Millions)	September 30, **2019**	2018	September 30, **2019**	2018	September 30, **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.

PENSION BENEFIT GUARANTY CORPORATION

STATEMENTS OF OPERATIONS AND CHANGES IN NET POSITION

	Single-Employer Program		Multiemployer Program		Memorandum Total	
	For the Years Ended September 30,		For the Years Ended September 30,		For the Years Ended September 30,	
(Dollars in Millions)	**2019**	2018	**2019**	2018	**2019**	2018
UNDERWRITING:						
Income:						
Premium, net (Note 11)	**$6,352**	$5,518	**$310**	$292	**$6,662**	$5,810
Other	**47**	38	**-**	-	**47**	38
Total	**6,399**	5,556	**310**	292	**6,709**	5,848
Expenses:						
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 probable 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.

PENSION BENEFIT GUARANTY CORPORATION

STATEMENTS OF CASH FLOWS

(Dollars in millions)	Single-Employer Program For the Years Ended September 30, **2019**	2018	Multiemployer Program For the Years Ended September 30, **2019**	2018	Memorandum Total For the Years Ended September 30, **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 ex-dividend date. Realized gains and losses on sales of investments are calculated using first-in, first-out for the revolving fund and weighted average cost for the trust fund. PBGC marks the plan's assets to market, and any increase or decrease in the market value of a plan's assets occurring after the date on which the plan is terminated must, by law, be credited to or suffered by PBGC.

SECURITIES PURCHASED UNDER REPURCHASE AGREEMENTS

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

SPONSORS OF TERMINATED PLANS

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

PREMIUMS

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

CAPITALIZED ASSETS

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

PRESENT VALUE OF FUTURE BENEFITS (PVFB)

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

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

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

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

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

(4) Net Claims for Probable Terminations: In accordance with the FASB Accounting Standards Codification Section 450, *Contingencies*, PBGC recognizes net claims for probable terminations which represent PBGC's best estimate of the losses, net of plan assets, and the present value of expected recoveries (from sponsors and members of their controlled group) for plans that are likely to terminate in the future. Under a specific identification process, PBGC evaluates each controlled group having $50 million or more of underfunding and recognizes a contingent loss for the estimated net claim of those plans meeting the probable termination criteria. These estimated losses are based on conditions that existed as of PBGC's fiscal year-end. 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:
  - Within 10 years are classified as probable.
  - 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

(Dollars in millions)	**September 30, 2019** **Basis**	**Market Value**	September 30, 2018 Basis	Market 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

[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.

INVESTMENTS OF MULTIEMPLOYER REVOLVING FUNDS AND MULTIEMPLOYER TRUSTEED PLANS

(Dollars in millions)	**September 30, 2019** **Basis**	**Market Value**	September 30, 2018 Basis	Market 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

INVESTMENT PROFILE

	September 30,	
	2019	2018
Fixed Income Assets		
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:

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

	Liability Derivative					
		September 30, 2019			September 30, 2018	
(Dollars in millions)	Statements of Financial Position Location	**Notional**	**FMV**	Statements of Financial 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
Derivatives						
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

* Less than $500,000

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

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

OFFSETTING OF DERIVATIVE LIABILITIES FAIR VALUE

	September 30, 2019			September 30, 2018		
(Dollars in millions)	**Gross Amount of Recognized Liabilities**	**Gross Amounts Offset in Statements of Financial Position**	**Net Amounts of Assets Presented in Statements of Financial Position**	Gross Amount of Recognized Liabilities	Gross Amounts Offset in Statements of Financial Position	Net Amounts of Assets Presented in Statements of Financial Position
Derivatives						
Interest-rate contracts	**$ 0***	**$ 0***	**$ 0***	$ 1	$ 0*	$ 1
Foreign exchange contracts	**32**	**(18)**	**14**	39	(19)	20
Other derivative contracts[1]	**1**	**(1)**	**0***	2	(1)	1
Cash collateral nettings	**-**	**-**	**-**	-	0*	0*
Total Derivatives	**$33**	**($19)**	**$14**	$42	($20)	$22
Other financial instruments[2]						
Resale agreements	**$ -**	**$ -**	**$ -**	$ -	$ -	$ -
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

	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 Liabilities Presented in Statements of Financial Position	**Collateral Received**	**Net Amount**	Net Amount of Liabilities Presented in Statements of Financial Position	Collateral Received	Net Amount
Resale agreements	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Security lending collateral	**4,719**	**(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

(Dollars in millions)	Location of Gain or (Loss) Recognized in Income on Derivatives	Amount of Gain or (Loss) Recognized in Income on Derivatives	
		Sept. 30, 2019	Sept. 30, 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.

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** [1]	$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).

[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).

NOTE 5: FAIR VALUE MEASUREMENTS

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

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

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

PBGC believes that its valuation techniques and underlying assumptions used to measure fair value conform to the provisions of Section 820. PBGC has categorized the financial assets and liabilities that PBGC carries at fair value in the Statements of Financial Position based upon the standard's valuation hierarchy. The

hierarchy gives the highest priority to quoted prices in active markets for identical assets or liabilities (Level 1), the next highest priority to pricing methods with significant observable market inputs (Level 2), and the lowest priority to significant unobservable valuation inputs (Level 3).

If the inputs used to measure a financial asset or liability cross different levels of the hierarchy, the categorization is based on the lowest level input that is significant to the fair value measurement. 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					
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	-	-	54,670	-	
Commercial paper/securities purchased under repurchase agreements	-	-	251	-	
Asset backed/Mortgage backed securities	-	-	4,584	-	
Pooled funds[2]	-	9	0*	-	
Pooled funds fixed maturity at NAV[2,3]	4,505	-	-	-	
Corporate bonds and other	-	1	16,255	-	
International securities	-	3	9,008	-	
Total Fixed Maturity Securities	4,505	13	84,768	-	89,286
Equity securities:					
Domestic	-	194	67	8	
International	-	1,933	2	0*	
Pooled funds[2]	-	36	-	-	
Pooled funds equity securities at NAV[2,3]	20,037	-	-	-	
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	-	1,495	-	8	
Real estate and real estate investment trusts at NAV[3]	1,065	-	-	-	
Total Real Estate	1,065	1,495	-	8	2,568
Insurance contracts and other Investments	-	0*	-	6	6
Receivables: [4]					
Derivative contracts[5]	-	5	243	-	248
Liabilities					
Payables: [4]					
Derivative contracts[6]	-	160	32	-	192

* Less than $500,000.

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

2 Pooled funds fixed and Pooled funds equity consists of domestic, international and global/other.

[3] 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.

[4] 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).

[5] 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)	$ -	-	-	-	-	-	$ -	$ -
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

[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.

[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	$146		

[1] Unfunded amounts include recallable distributions. A substantial portion of the unfunded commitments is unlikely to be called.
[2] These amounts include unfunded commitments that are measured at Net Asset Value.

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.

PBGC uses recent prices of group annuities to derive the interest factors used to calculate the present value of future benefit-payment obligations. PBGC determines the interest-factor set that, when combined with a

specified mortality table, produces present values that approximate the prices private insurers would charge to annuitize the same benefit-payment obligations.

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

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

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

[1] Level 3 Fair Value Measurements.
[2] Actual factors and PVFB amounts calculated for September 30, 2019, fiscal year-end financial statements.
[3] Gross PVFB liability for trusteed plans prior to the netting of recoveries.

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.

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 (in Years)	09/30/2019	09/30/2018	Change		Period (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%
			Longer 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%
			Remaining 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

(Dollars in millions)	**September 30, 2019** **Basis**	**Market Value**	September 30, 2018 Basis	Market 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

(Dollars in millions)		**2019**		September 30, 2018
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.
[2] For fiscal year ended September 30, 2019, PBGC did not have any specifically identified single-employer plans classified as probable in inventory

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 Probables from 1987-2018 at September 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%

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**	$1,180
Financial assistance payments	**160**	153
Financial assistance - premiums waived	**2**	3
Write-offs related to settlement agreements	**0** *	(1)
Subtotal	**1,497**	1,335
Allowance for uncollectible amounts	**(1,497)**	(1,335)
Net balance at end of year	**$ -**	$ -

* 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.
[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] "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.

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 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
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

(Dollars in millions)	**September 30, 2019**	September 30, 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 September 30,	Operating 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

	Single-Employer Plans			Multiemployer Plans
	Flat Rate Premium	Variable Rate Premium		
Plan Years Beginning in	Rate Per Participant	Rate per $1,000 UVBs	Per Participant Cap	Flat Rate Premium Rate Per Participant
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

(Dollars in Million)	Single-Employer Sept. 30, 2019	Single-Employer Sept. 30, 2018	Multiemployer Sept. 30, 2019	Multiemployer Sept. 30, 2018	Memorandum Total Sept. 30, 2019	Memorandum Total Sept. 30, 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 *	**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)
Total Net Premiums	**$6,662**	$5,810

* 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 Bad Debts for Premiums, Interest, and Penalties	**(2)**	(3)
Total Multiemployer	**310**	292
Total Net Premiums	**$6,662**	$5,810

* 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		
(Dollars in millions)	**New Terminations**	**Changes in Prior Years' Terminations[6]**	**Total**	New Terminations	Changes in Prior Years' Terminations[6]	Total
Present value of future benefits	**$4,614**	**($59)**	**$4,555**	$4,419	$ 7	$4,426
Less plan assets	**3,060**	**121**	**3,181**	3,128	107	3,235
Plan asset insufficiency	**1,554[1]**	**(180)**	**1,374**	1,291	(100)	1,191
Less estimated recoveries	**-**	**(61)**	**(61)**	-	(57)	(57)
Subtotal	**1,554[2]**	**(119)**	**1,435**	1,291[2]	(43)	1,248
Settlements and judgments		**0*[7]**	**0*[7]**		1[7]	1[7]
Loss (credit) on probables	**(1,354)[3]**	**10[4]**	**(1,344)[5]**	(682)	(889)[4]	(1,571)[5]
Total	**$ 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.

[2] Net 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.

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

[4] Includes 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 securities:						
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** *	**-**	**0** *	(1)	-	(1)
Unrealized gain (loss)	**0** *	**-**	**0** *	0 *	-	0 *
Total other income	**6**	**-**	**6**	3	-	3
Total investment income	**$14,820**	**$442**	**$15,262**	$1,502	($52)	$1,450

*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)

	September 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-Employer Program		Multiemployer Program		Memorandum Total	
	September 30,		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 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**	-	**-**	-	**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.

Audit of the Pension Benefit Guaranty Corporation's

Fiscal Year 2019 and 2018 Financial Statements

Audit Report AUD-2020-2/FA-19-137-1

Section III

Management Comments

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PBGC
Protecting America's Pensions
Pension Benefit Guaranty Corporation
1200 K Street, N.W., Washington, D.C. 20005-4026

Office of the Director

NOV 15 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

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Audit of the Pension Benefit Guaranty Corporation's

Fiscal Year 2019 and 2018 Financial Statements

Audit Report AUD-2020-2/FA-19-137-1

Supplemental Management Response

Received on December 16, 2019

PBGC
Protecting America's Pensions
Pension Benefit Guaranty Corporation
1200 K Street, N.W., Washington, D.C. 20005-4026

Office of the Director

DEC 16 2019

MEMORANDUM

To: Robert A. Westbrooks
Inspector General

From: Gordon Hartogensis
Director

Subject: Supplemental Management Response to the Independent Auditor's Combined Audit Report for the FY 2019 Financial Statement Audit

Thank you for incorporating our earlier response to the Fiscal Year 2019 Independent Auditor's Combined Report that was published on November 15, 2019. We would like to provide additional information regarding our plans to address the 11 new recommendations included in that report. Please refer to the attachment to this memorandum.

As we work to address these recommendations, we will coordinate with your office, as needed, and will submit for your review evidence documenting any corrective actions taken.

Addressing the Office of Inspector General's audit recommendations in a timely and effective manner helps improve Pension Benefit Guaranty Corporation's control environment and support compliance with Office of Management and Budget Circular A-50, *Audit Follow-up,* and the Government Accountability Office's *Standards for Internal Control in the Federal Government.*

Please contact Frank Pace should you have any questions.

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

OIG Recommendation No. FS-19-01: 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.

PBGC Response: PBGC agrees with this recommendation. The Actuarial Services and Technology Department (ASTD) is now in the beginning stages of implementing the corrective actions discussed in this recommendation. It will complete a comprehensive evaluation of all Present Value of Future Benefit (PVFB) actuarial assumptions, including sensitivity analysis and analyses benchmarking the PVFB assumptions to other relevant reports or studies, and clear documentation of the rationale behind each assumption such that another actuary has enough information to assess the reasonableness of the assumptions. ASTD will also develop a process and schedule for reviewing and updating assumptions, including a dollar amount and/or percentage change in liability that would trigger an assumptions review.

Target Completion Date: 6/30/2020

OIG Recommendation No. FS-19-02: 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 Pension Benefit Guaranty Corporation's (PBGC) actuarial liability.

PBGC Response: PBGC agrees with this recommendation. In addition to the corrective actions that will be completed to address the findings and recommendations in the Notification of Financings and Recommendations (NFR) 19-01, ASTD will enhance its assumption documents and memos to include sources for all assumptions, the risks inherent in those assumptions, and any data limitations which could impact the PVFB.

Target Completion Date: 6/30/2020

OIG Recommendation No. FS-19-03: Perform an experience study to assess the reasonableness of the multiemployer contingent liability for on-going and terminated plans.

PBGC Response: PBGC agrees with this recommendation. The Office of Negotiations and Restructuring (ONR) will perform an experience study to assess the reasonableness of the multiemployer (ME) contingent liability criteria for ongoing and terminated plans. This will include expanded analysis, experience study, and back testing of our ME contingent liability determinations over the past 10 years. ONR will provide a progress status update at the end of July 2020.

Target Completion Date: 3/31/2021

OIG Recommendation No. FS-19-04: Perform an analysis of all multiemployer plans on the contingency list that have exceeded the 10-year Date of Insolvency (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.

PBGC Response: PBGC agrees with this recommendation. ONR will perform an analysis of all ME plans on the contingency list which have exceeded the 10-year DOI for both terminated and on-going plans; we will also perform an analysis for reasonably possible classified plans. To satisfy the goals of this recommendation, we will evaluate ME plans with more than 2,500 participants, because we use the small plan bulk reserve to estimate small plan liabilities. ONR will provide a progress status update at the end of July 2020.

Target Completion Date: 3/31/2021

OIG Recommendation No. FS-19-05: Develop and/or update management's documentation for current practices followed for review and monitoring of the multiemployer DOI of insolvency criteria.

PBGC Response: PBGC agrees with this recommendation. ONR will develop and/or update documentation of current practices utilized for review and monitoring of DOI criteria. ONR will provide a progress status update at the end of July 2020.

Target Completion Date: 3/31/2021

OIG Recommendation No. FS-19-06: Promptly correct the errors in its calculations identified by the auditors during the FY 2019 audit.

PBGC Response: PBGC agrees with this recommendation. ASTD will correct the errors identified by the auditors. When making these corrections, we will follow PBGC Policy 5.8-1, *Benefit Corrections*, and correct benefits that increase by $1.00 or more or decrease by $5.00 or more.

Target Completion Date: 6/30/2020

OIG Recommendation No. FS-19-07: Review the LTV Steel Hourly plan to determine the impact of the cash balance add-back threshold for those participants affected.

PBGC Response: PBGC agrees with this recommendation. ASTD will review the impact of this error on the benefits of those participants who are potentially affected and take necessary actions.

Target Completion Date: 6/30/2020

OIG Recommendation No. FS-19-08: 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.

PBGC Response: PBGC agrees with this recommendation. ASTD will review the impact of this error on the benefits of those participants who are potentially affected and make any necessary corrections.

Target Completion Date: 6/30/2020

OIG Recommendation No. FS-19-09: Review the other three participants in the Seymour Specialty Wire Company – Salary plan and make necessary benefit corrections.

PBGC Response: PBGC agrees with this recommendation. ASTD will review the benefits of the other three participants and make any necessary corrections.

Target Completion Date: 6/30/2020

OIG Recommendation No. FS-19-10: The Office of Benefits Administration (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.

PBGC Response: PBGC agrees with this recommendation. OBA will work with our paying agent to identify a way in which confirmation of access to servers that contain PBGC data can be provided to PBGC.

Target Completion Date: 06/30/2020

OIG Recommendation No. FS-19-11: Conduct an account recertification of Linux users and groups with access to PBGC Pension Lump Sum System (PLUS) data to verify that only authorized users have access and the privileges are appropriate.

PBGC Response: PBGC agrees with this recommendation. OBA will work with our paying agent to ensure an account recertification of Linux users and groups with access to PBGC data in the PLUS system is completed and PBGC can then verify that access recertification has been completed.

Target Completion Date: 06/30/2020