



OFFICE OF INSPECTOR GENERAL AUDIT REPORT

Audit of the Pension Benefit Guaranty Corporation's Fiscal Year 2017 and 2016 Financial Statements

**Report No. AUD-2018-4
November 15, 2017**

This page intentionally left blank.



Office of Inspector General Pension Benefit Guaranty Corporation

November 15, 2017

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, 2017 and 2016. CLA conducted the audit in accordance with the following auditing standards: Government Auditing Standards issued by the Comptroller General of the United States, attestation standards established by the American Institute of Certified Public Accountants, and the Office of Management and Budget's 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, 2017 and 2016, 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 25th consecutive unmodified financial statement audit opinion.
- PBGC maintained, in all material respects, effective internal control over financial reporting as of September 30, 2017, 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). Serious internal control weaknesses in PBGC's programs and operations include three significant deficiencies (Controls over the Present Value of Future Benefit Liability, Present Value of Nonrecoverable Future Financial Assistance, and Access Controls and Configuration Management).
- An instance of noncompliance or other matters that are required to be reported in accordance with Government Auditing Standards. Specifically, PBGC was not in

Board of Directors
November 15, 2017
Page 2

compliance with law and regulation due to a violation of the Antideficiency Act determined after guidance from GAO relative to the recording of obligations for multi-year leases. PBGC has submitted the draft ADA report to OMB for external reporting, as required, and is in the process of remediating all leases to conform to GAO guidance.

CLA is responsible for the accompanying auditor's report dated November 15, 2017 and the conclusions expressed in the report. We do not express opinions on PBGC's financial statements or internal control, nor do we draw conclusions on compliance with laws and regulations. The financial statement audit report (AUD-2018-4 / FA-17-119-1) is also available on our website at oig.pbgc.gov.

Respectfully,

A handwritten signature in black ink, appearing to read "Robert A. Westbrooks". The signature is fluid and cursive, with the first name "Robert" being more prominent.

Robert A. Westbrooks
Inspector General

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

Audit of the Pension Benefit Guaranty Corporation's
Fiscal Year 2017 and 2016 Financial Statements

Audit Report AUD-2018-4/ FA-17-119-1

Section I

Independent Auditors' Report

This page intentionally left blank.



CliftonLarsonAllen LLP
CLAconnect.com

INDEPENDENT AUDITORS' REPORT

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

Report on the Financial Statements

We have audited the accompanying financial statements of the Pension Benefit Guaranty Corporation (PBGC), which comprise the statements of financial position as of September 30, 2017 and 2016, 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 the 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. 17-03, *Audit Requirements for Federal Financial Statements* (OMB Bulletin 17-03). Those standards and OMB Bulletin 17-03 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.

INDEPENDENT AUDITORS' REPORT (CONTINUED)

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, 2017 and 2016, 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

By law, PBGC's Single-Employer and Multiemployer Program Funds must be self-sustaining. As of September 30, 2017, PBGC reported in its financial statements net deficit positions (liabilities in excess of assets) in the Single-Employer and Multiemployer Program Funds of approximately \$11 billion and \$65 billion, respectively. 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 \$238 billion and \$14 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, 2015, and adjusted the value reported for liabilities to the estimated balance as of December 31, 2016, using actuarial assumptions. PBGC did not adjust the estimate for economic conditions that occurred between December 31, 2016 and September 30, 2017, and as a result, the actual loss for the Single-Employer Program as of September 30, 2017, 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 neither program at present has 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) 2017 Financial Statement Highlights, Management's Discussion and Analysis, Analysis of Entity's Systems, Controls and Legal Compliance, Management Representation, Improper Payment Reporting, 2017 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, 2017, 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).

INDEPENDENT AUDITORS' REPORT (CONTINUED)

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 exist. 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, 2017, based on criteria established under FMFIA and OMB Circular A-123.

INDEPENDENT AUDITORS' REPORT (CONTINUED)

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

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

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

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

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

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

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

Management's Responsibility for Compliance

Management is responsible for complying with applicable 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 audits, 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.

INDEPENDENT AUDITORS' REPORT (CONTINUED)

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.

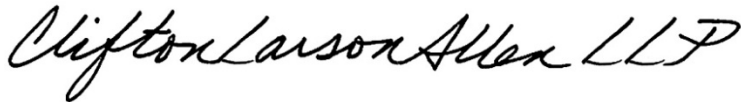
Management's Response to Findings

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, 2016. The status of prior year findings is presented in Exhibit III.

CliftonLarsonAllen LLP

A handwritten signature in black ink that reads "CliftonLarsonAllen LLP". The signature is written in a cursive, flowing style.

Calverton, Maryland
November 15, 2017

PENSION BENEFIT GUARANTY CORPORATION
INTERNAL CONTROL DEFICIENCIES
September 30, 2017

BACKGROUND

PBGC protects the pensions of approximately 40 million workers and retirees in nearly 24 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 2017, 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 strengthened its control environment by implementing management practices to mitigate control deficiencies reported in previous years. Further, management improved its current business processes to address specific financial reporting and information technology control deficiencies. However, management should continue to focus its efforts to resolve outstanding conditions.

The following provides an overview of each of the significant deficiencies identified in our report:

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

During FY 2017, the Office of Benefits Administration (OBA) continues to implement strategic internal initiatives to strengthen its risk-based corrective actions to mitigate control deficiencies over the PVFB liability. The PVFB liability represents the estimated liability for future benefits that PBGC is, or will be obligated to pay participants of covered Single-Employer and certain Multiemployer pension plans. These initiatives include performing trend analysis of known conditions that affect the PVFB estimated liability calculation and assessing its overall impact on the likelihood of a material misstatement. Further, OBA continues to refine its actuarial valuation tool used to calculate the PVFB liability. These refinements enhance the overall capability of the software tool and reduce the risk of reliance on imprecise assumptions. Although progress has been made to controls over the calculation of the PVFB liability, certain conditions remain that require management's concerted effort for improvement.

Calculation of the Present Value of Future Benefit Liability

Consistent with the previous year, we identified errors in the calculation of participant benefits and the related PVFB liability. Specifically, our testing of the PVFB liability reported at June 30 and September 30, continue to reveal:

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

PENSION BENEFIT GUARANTY CORPORATION
INTERNAL CONTROL DEFICIENCIES
September 30, 2017

The resolution of these errors requires management continued focus to accurately calculate valuations for some participant's benefits and properly estimate and report related future liabilities.

Recommendations:

We continue to recommend that PBGC management:

- Develop and/or implement improvements to OBA systems used to calculate benefits and liabilities (Spectrum and the Integrated Present Value of Futures Benefit Systems).
- .
- Implement corrective action to address root cause of data entry and inaccurate use of plan data provisions.

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

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

PBGC continues to have data inputs error in its calculation of the PV NRFFA. Also, we found that PBGC did not update its PV NRFFA valuation methodology that includes a change in premium rates for covered multiemployer plans. During FY 2017, PBGC did not implement an effective quality control review process. Further, PBGC did not fully consider that impact on the exclusion of the premium increase to its liability. Consequently, these errors resulted in misstatements to the PV NRFFA liability at June 30.

The Multiemployer Working Group Procedures for 2016, Appendix D states that "PBGC will use the most recently available data." In addition, "Actuarial Services and Technology Department (ASTD) will follow its existing controls for review and sign off on data entry and computations."

Recommendations:

We continue to recommend that PBGC management:

- Consider methods of calculating, reviewing, and documenting plan level adjustments to the IPVFB inputs in order to take individual plan conditions into account.
- Refine current quality control review procedures to effectively minimize data input errors.

3. Access Controls and Configuration Management

In FY 2017, PBGC focused on resolving its Entity-wide Security Management weaknesses and continued to implement technologies and processes to address long standing access controls and configuration management weaknesses. However, the controls require time to mature and show evidence of their effectiveness. In addition, PBGC realizes it requires cycle time and institutional maturity to fully resolve some security weaknesses. Weaknesses in the

PENSION BENEFIT GUARANTY CORPORATION
INTERNAL CONTROL DEFICIENCIES
September 30, 2017

PBGC IT environment continue to contribute to deficiencies in system configuration, segregation of duties and role-based access controls based on least privilege.

PBGC access and configuration management processes continue to improve in FY 2017. For example, PBGC implemented various tools and processes to establish a more coherent 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 components¹ 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 their end of service life.
- Development and implementation of a plan of action to address known security weaknesses in accordance with PBGC's timeline for corrective action.
- Full implementation of all security enhancements to PBGC websites to ensure compliance with the Office of Management and Budget (OMB) M-15-13, *A Policy to Require Secure Connections across Federal Websites and Web Services*.
- Modernization of systems and applications to ensure the cryptography implemented is FIPS 140-2, *Security Requirements for Cryptographic Modules*, compliant.

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

PENSION BENEFIT GUARANTY CORPORATION
INTERNAL CONTROL DEFICIENCIES
September 30, 2017

- 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.
- Full implementation of controls to remove separated users from systems and applications.

Recommendations:

We continue to recommend that PBGC management:

- Develop and implement the following:
 - Controls to remedy vulnerabilities identified noted in key databases and applications such as weaknesses in configuration, roles, privileges, auditing, file permissions 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 their end of service life.
 - A process to address known security weaknesses in accordance with PBGC's timeline for corrective actions.
 - Document and implement enhanced process and procedures to effectively track and remediate known vulnerabilities in a timely manner.
 - Complete the full implementation of security enhancements for PBGC websites in accordance with all OMB M-15-13 requirements.
 - Perform a risk based assessment and implement compensating controls for FIPS 140-2 non-compliance and non-encryption of data in moderate-impact systems.
 - 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.
 - 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.
 - Requirements for the disposition of dormant accounts for all PBGC systems.
 - Effective controls to remove separated users from systems and applications.

**PENSION BENEFIT GUARANTY CORPORATION
NONCOMPLIANCE WITH LAWS AND REGULATIONS
September 30, 2017**

NONCOMPLIANCE WITH THE ANTIDEFICIENCY ACT**Potential Noncompliance****Leases**

In FY 2016, we found that the Corporation violated the Antideficiency Act due to its failure to record in full, all contractual obligations incurred in connection with its headquarters operating lease agreements. The Corporation disclosed in its FY 2017 FMFIA assurance statement that PBGC is in the process of remediating all remaining leases to conform to the GAO guidance for the recording of obligations for multiple – year leases. Further, the Corporation asserted that all operating leases up to five years could be incrementally funded based on authority established by 41 USC, section 3903. The Corporation's position is not consistent with the reporting of its headquarters violations to OMB in FY 2017. During our inspection of the Field Benefit Administrators (FBA) lease agreements, we found that Corporation may have violated the Antideficiency statute again in FY 2017. The Corporation did not perform a sufficient review of all operating leases to determine whether it complied with the Anti-Deficiency Act provisions, as described in OMB Circular A -11, *Preparation, Submission and Execution of the Budget*. In summary, the Corporation has 3 headquarters leases, 1 COOP lease and 5 FBA office leases.

Recommendation:

We recommend that PBGC management:

- Perform a comprehensive review of all operating lease arrangements and determine whether the Corporation complies with the Antideficiency Act provisions. Report all violations to OMB immediately.
- Develop and implement a remediation plan to resolve any current and future potential funding deficiencies related to operating lease arrangements.

**PENSION BENEFIT GUARANTY CORPORATION
STATUS OF PRIOR YEAR'S FINDINGS**

Prior Year Condition	Status as Reported at September 30, 2016 ²	Status as of September 30, 2017
1. Controls over PVFB Liability	<u>Significant Deficiency</u> : PBGC had weaknesses in the calculation of the PVFB Liability	Repeated as significant deficiency number 1 and included in Exhibit I.
2. Present Value of Nonrecoverable Future Financial Assistance (PV NRFFA)	<u>Significant Deficiency</u> : PBGC had weaknesses in the following: <ul style="list-style-type: none"> Using the most current and relevant data to update actuarial assumptions Data input errors used to calculate PV NRFFA 	Repeated as significant deficiency number 2 and included in Exhibit I.
3. Entity-wide Security Program Planning and Management	<u>Significant Deficiency</u> : PBGC had weaknesses in the following: <ul style="list-style-type: none"> PBGC had not completed security assessments and authorizations for its major applications. Weaknesses in PBGC's infrastructure design and deployment strategy for systems and applications adversely affected its ability to effectively implement common security controls across its systems and applications. 	Partially resolved and included in the Management Letter.
4. Access Controls and Configuration Management	<u>Significant Deficiency</u> : Weaknesses in the IT environment contributed to deficiencies in system configuration, segregation of duties, role-based access controls, and monitoring.	Partially resolved and repeated as significant deficiency number 3 and included in Exhibit I.

² Report on Internal Control Related to Pension Benefit Guaranty Corporation's Fiscal Year 2016 and 2015 Financial Statements Audit: <http://oig.pbgc.gov/pdfs/FA-16-110-2.pdf>

**PENSION BENEFIT GUARANTY CORPORATION
STATUS OF PRIOR YEAR'S FINDINGS**

Compliance and Other Matters		
Noncompliance with Title 31 of the <i>Code of Federal Regulation</i> (C.F.R.), Part 1342	PBGC reported an Antideficiency Violation – Limitations on Voluntary Services, to the President, President of the Senate, Congress, Speaker of the House of Representatives, OMB Director and the Comptroller General	Resolved.
Potential Noncompliance Title 31 of the <i>Code of Federal Regulation</i> (C.F.R.), Part 1501(a)	PBGC did not record its full contractual obligation under its current multiyear lease arrangement. PBGC has disclosed this matter to OMB and is currently awaiting a decision.	Repeated as a potential Noncompliance with Antideficiency Act in Exhibit II.

**PENSION BENEFIT GUARANTY CORPORATION
MANAGEMENT'S RESPONSE TO FY 2017
INDEPENDENT AUDITORS' REPORT
September 30, 2017**



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

Office of the Director

NOV 15 2017

MEMORANDUM

To: Robert Westbrooks
Inspector General

From: W. Thomas Reeder *W. Thomas Reeder*
Director

Subject: Response to the Independent Auditor's Combined Audit Report for the
FY 2017 Financial Statement Audit

Thank you for the opportunity to comment on the Office of Inspector General's FY 2017 audit results regarding the agency's financial statements, internal controls, and compliance with laws and regulations. PBGC protects the pensions of millions of Americans, so it is especially noteworthy that our financial statements have once again received an unmodified opinion.

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

cc: Patricia Kelly
Cathleen Kronopolus
Alice Maroni
Karen Morris
Ann Orr
Michael Rae
Robert Scherer
Judith Starr
Martin O. Boehm
Theodore J. Winter

This page intentionally left blank.

Audit of the Pension Benefit Guaranty Corporation's
Fiscal Year 2017 and 2016 Financial Statements

Audit Report AUD-2018-4/ FA-17-119-1

Section II

**Pension Benefit Guaranty Corporation's
Fiscal Year 2017 and 2016 Financial Statements**

This page intentionally left blank.

PENSION BENEFIT GUARANTY CORPORATION
STATEMENTS OF FINANCIAL POSITION

	Single-Employer Program		Multiemployer Program		Memorandum Total	
	September 30,		September 30,		September 30,	
<i>(Dollars in Millions)</i>	2017	2016	2017	2016	2017	2016
ASSETS						
Cash and cash equivalents	\$5,185	\$ 4,423	\$149	\$ 102	\$5,334	\$ 4,525
Securities lending collateral (Notes 3 and 5)	3,106	1,910	-	-	3,106	1,910
Investments, at market (Notes 3 and 5):						
Fixed maturity securities	60,666	57,292	1,921	1,925	62,587	59,217
Equity securities	26,748	23,684	-	-	26,748	23,684
Private equity	606	721	-	-	606	721
Real estate and real estate investment trusts	3,114	2,963	-	-	3,114	2,963
Other	16	72	-	-	16	72
Total investments	91,150	84,732	1,921	1,925	93,071	86,657
Receivables, net:						
Sponsors of terminated plans	17	55	-	-	17	55
Premiums (Note 11)	4,439	4,534	180	165	4,619	4,699
Sale of securities	1,555	1,080	-	-	1,555	1,080
Derivative contracts (Note 4)	212	124	-	-	212	124
Investment income	495	441	10	10	505	451
Other	5	6	-	-	5	6
Total receivables	6,723	6,240	190	175	6,913	6,415
Capitalized assets, net	32	37	2	2	34	39
Total assets	\$106,196	\$97,342	\$2,262	\$2,204	\$108,458	\$99,546

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

PENSION BENEFIT GUARANTY CORPORATION
STATEMENTS OF FINANCIAL POSITION

	Single-Employer Program		Multiemployer Program		Memorandum Total	
	September 30,		September 30,		September 30,	
<i>(Dollars in Millions)</i>	2017	2016	2017	2016	2017	2016
LIABILITIES						
Present value of future benefits, net (Note 6):						
Trusted plans	\$107,974	\$ 113,011	-	-	\$107,974	\$ 113,011
Plans pending termination and trusteeship	46	296	-	-	46	296
Settlements and judgments	18	21	-	-	18	21
Claims for probable terminations	3,242	376	-	-	3,242	376
Total present value of future benefits, net	111,280	113,704	-	-	111,280	113,704
Present value of nonrecoverable future financial assistance (Note 7)						
Insolvent plans	-	-	2,662	2,139	2,662	2,139
Probable insolvent plans	-	-	64,621	58,870	64,621	58,870
Total present value of nonrecoverable future financial assistance	-	-	67,283	61,009	67,283	61,009
Payables, net:						
Derivative contracts (Note 4)	161	49	-	-	161	49
Due for purchases of securities	2,290	2,037	-	-	2,290	2,037
Payable upon return of securities loaned	3,106	1,910	-	-	3,106	1,910
Unearned premiums	221	167	8	7	229	174
Accounts payable and accrued expenses (Note 8)	52	55	23	21	75	76
Total payables	5,830	4,218	31	28	5,861	4,246
Total liabilities	117,110	117,922	67,314	61,037	184,424	178,959
Net position	(10,914)	(20,580)	(65,052)	(58,833)	(75,966)	(79,413)
Total liabilities and net position	\$106,196	\$ 97,342	\$2,262	\$2,204	\$108,458	\$ 99,546

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

PENSION BENEFIT GUARANTY CORPORATION
STATEMENTS OF OPERATIONS AND CHANGES IN NET POSITION

	Single-Employer Program		Multiemployer Program		Memorandum Total	
	For the Years Ended September 30,		For the Years Ended September 30,		For the Years Ended September 30,	
<i>(Dollars in Millions)</i>	2017	2016	2017	2016	2017	2016
UNDERWRITING:						
Income:						
Premium, net (Note 11)	\$6,739	\$ 6,379	\$291	\$ 282	\$7,030	\$ 6,661
Other	184	25	-	-	184	25
Total	6,923	6,404	291	282	7,214	6,686
Expenses:						
Administrative	371	362	42	39	413	401
Other	26	4	-	-	26	4
Total	397	366	42	39	439	405
Other underwriting activity:						
Losses (credits) from completed and probable terminations (Note 12)	3,063	(417)	-	-	3,063	(417)
Losses from insolvent and probable plans-financial assistance (Note 7)	-	-	6,438	6,768	6,438	6,768
Actuarial adjustments (credits) (Note 6)	(1,299)	2,285	(40)	11	(1,339)	2,296
Total	1,764	1,868	6,398	6,779	8,162	8,647
Underwriting gain (loss)	4,762	4,170	(6,149)	(6,536)	(1,387)	(2,366)
FINANCIAL:						
Investment income (loss) (Note 13):						
Fixed	624	5,780	(53)	143	571	5,923
Equity	4,453	2,768	-	-	4,453	2,768
Private equity	129	81	-	-	129	81
Real estate	145	7	-	-	145	7
Other	12	12	-	-	12	12
Total	5,363	8,648	(53)	143	5,310	8,791
Expenses:						
Investment	110	103	-	-	110	103
Actuarial charges (Note 6):						
Due to expected interest	2,532	2,929	62	56	2,594	2,985
Due to change in interest factors	(2,183)	6,301	(45)	100	(2,228)	6,401
Total	459	9,333	17	156	476	9,489
Financial gain (loss)	4,904	(685)	(70)	(13)	4,834	(698)
Net income (loss)	9,666	3,485	(6,219)	(6,549)	3,447	(3,064)
Net position, beginning of year	(20,580)	(24,065)	(58,833)	(52,284)	(79,413)	(76,349)
Net position, end of year	(\$10,914)	\$ (20,580)	(\$65,052)	\$ (58,833)	(\$75,966)	\$ (79,413)

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

PENSION BENEFIT GUARANTY CORPORATION

STATEMENTS OF CASH FLOWS

(Dollars in millions)	Single-Employer Program		Multiemployer Program		Memorandum Total	
	For the Years Ended September 30,		For the Years Ended September 30,		For the Years Ended September 30,	
	2017	2016	2017	2016	2017	2016
OPERATING ACTIVITIES:						
Premium receipts	\$ 6,888	\$ 5,250	\$ 277	\$ 270	\$ 7,165	\$ 5,520
Interest and dividends received	2,483	2,107	68	46	2,551	2,153
Cash received from plans upon trusteeship	20	25	-	-	20	25
Receipts from sponsors/non-sponsors	712	88	-	-	712	88
Receipts from the missing participant program	18	6	-	-	18	6
Other receipts	1	6	-	-	1	6
Benefit payments – trustee plans	(5,686)	(5,592)	-	-	(5,686)	(5,592)
Financial assistance payments	-	-	(141)	(113)	(141)	(113)
Settlements and judgments	(5)	(11)	-	-	(5)	(11)
Payments for administrative and other expenses	(468)	(454)	(29)	(28)	(497)	(482)
Accrued interest paid on securities purchased	(393)	(284)	(16)	(6)	(409)	(290)
Net cash provided (used) by operating activities (Note 15)	3,570	1,141	159	169	3,729	1,310
INVESTING ACTIVITIES:						
Proceeds from sales of investments	103,440	82,406	2,878	1,384	106,318	83,790
Payments for purchases of investments	(106,248)	(82,818)	(2,990)	(1,462)	(109,238)	(84,280)
Net change in investment of securities lending collateral	1,196	665	-	-	1,196	665
Net change in securities lending payable	(1,196)	(665)	-	-	(1,196)	(665)
Net cash provided (used) by investing activities	(2,808)	(412)	(112)	(78)	(2,920)	(490)
Net increase (decrease) in cash and cash equivalents	762	729	47	91	809	820
Cash and cash equivalents, beginning of year	4,423	3,694	102	11	4,525	3,705
Cash and cash equivalents, end of year	\$ 5,185	\$ 4,423	\$ 149	\$ 102	\$ 5,334	\$ 4,525

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

The accompanying notes are an integral part of these financial statements

NOTES TO FINANCIAL STATEMENTS

September 30, 2017 and 2016

NOTE 1: ORGANIZATION AND PURPOSE

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

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

For financial statement purposes, PBGC divides its business activity into two broad areas — “Underwriting Activity” and “Financial Activity” — covering both single-employer and multiemployer program segments. PBGC’s Underwriting Activity provides financial guaranty insurance in return for insurance premiums (whether actually paid or not). Actual and expected probable losses that result from the termination of underfunded pension plans are included in this category, as are actuarial adjustments based on changes in actuarial assumptions, such as mortality. Financial Activity consists of the performance of PBGC’s assets and liabilities. PBGC’s assets consist of premiums collected from defined benefit plan sponsors, assets from distress or involuntarily 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 involuntary terminations. 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, 2017, the single-employer and multiemployer programs reported net positions of \$(10,914) million and \$(65,052) million, respectively. The single-employer program had assets of \$106,196 million offset by total liabilities of \$117,110 million, which include a total present value of future benefits (PVFB) of \$111,280 million. As of September 30, 2017, the multiemployer program had assets of \$2,262 million offset by \$67,283 million in present value of nonrecoverable future financial assistance. Notwithstanding these deficits, the Corporation has sufficient liquidity to meet its obligations (liabilities) for a significant number of years; however, neither program at present has the resources to fully satisfy PBGC’s long-term obligations to plan participants. The multiemployer program is particularly at risk.

PBGC’s \$98,910 million of total investments (including cash and investment income receivable) represents the largest component of PBGC’s Statements of Financial Position combined assets of \$108,458 million at September 30, 2017. This amount of \$98,910 million (as compared to investments under management of \$97,130 million, as reported in section VII Investment Activities) reflects the fact that PBGC experiences a recurring inflow of trustee 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 (\$68,417 million) represent 69 percent of the total investments, while equity securities (\$26,757 million) represent 27 percent of total investments. Private market assets, real estate, and other investments (\$3,736 million), represent 4 percent of the total investments.

SINGLE-EMPLOYER AND MULTIEMPLOYER PROGRAM EXPOSURE

PBGC’s estimate of the total underfunding in single-employer plans was \$238,188 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, 2017. This is an increase of \$14,913 million from the reasonably possible exposure of \$223,275 million in FY 2016. This increase is primarily due to the decrease in the interest factors used for valuing liabilities. These estimates are measured as of December 31 of the

previous year (see Note 9). For FY 2017, this exposure is concentrated in the following sectors: manufacturing (primarily automobile/auto parts and fabricated metals), transportation (primarily airlines)/communications/utilities, and services.

PBGC estimates that as of September 30, 2017, it is reasonably possible that multiemployer plans may require future financial assistance in the amount of \$13,972 million (see Note 9). This is a decrease of \$5,513 million from the reasonably possible exposure of \$19,485 million in FY 2016. The primary reasons for the decrease in liability was due to changes in the plan inventory as well as changes in the data and underlying assumptions..

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 only 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 involuntarily terminates a plan under one of five specified statutory tests. The net liability assumed by PBGC is generally equal to the present value of the future benefits payable by PBGC less amounts provided by the plan's assets and amounts recoverable by PBGC from the plan sponsor and members of the plan sponsor's controlled group, as defined by ERISA.

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

NOTE 2: SIGNIFICANT ACCOUNTING POLICIES

BASIS OF PRESENTATION

The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP). The preparation of the financial statements, in conformity with U.S. GAAP, requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Estimates and assumptions may change over time as new information is obtained or subsequent developments occur. Actual results could differ from those estimates.

RECENT ACCOUNTING DEVELOPMENTS

In May 2015, the FASB issued Update No. 2015-07, "Fair Value Measurement (Topic 820, Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent))," which removes investments from the fair value hierarchy for which the practical expedient is used to measure fair value at net asset value (NAV). Instead, an entity is required to include those investments as a reconciling line item so that

the total fair value amount of investments in the disclosure is consistent with the amount on the balance sheet. The amendment is effective beginning October 1, 2017. Adoption of this amendment is not expected to have a material effect on our financial statements.

In April 2015, the FASB issued Update No. 2015-05, “Intangibles-Goodwill and Other-Internal-Use Software (Subtopic 350-40; Customer’s Accounting for Fees Paid in a Cloud Computing Arrangement),” which provides guidance in evaluating the accounting for fees paid by a customer in a cloud computing arrangement. The amendment, which allows for early adoption, is effective beginning October 1, 2016. Adoption of this amendment will not affect PBGC’s financial statements.

In February 2015, the FASB issued an amendment to U.S. GAAP to remove the concept of “extraordinary items,” which are defined as items that are unusual and infrequent in nature. The amendment, which allows for early adoption, is effective beginning on October 1, 2016. Adoption of this amendment is not expected to have an impact on our financial statements.

VALUATION METHOD

A primary objective of PBGC’s financial statements is to provide information that is useful in assessing PBGC’s present and future ability to ensure that its plan beneficiaries receive benefits when due. Accordingly, PBGC values its financial assets at estimated fair value, consistent with the standards for pension plans contained in the FASB Accounting Standards Codification Section 960, Defined Benefit Pension Plans. PBGC values its liabilities for the present value of future benefits and present value of nonrecoverable future financial assistance using assumptions derived from market-based (fair value) annuity prices from insurance companies, as described in the Statement of Actuarial Opinion. As described in Section 960, the assumptions are “those assumptions that are inherent in the estimated cost at the (valuation) date to obtain a contract with an insurance company to provide participants with their accumulated plan benefits.” 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 trustee 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 trustee, 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 trustee 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 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 submitted, for plans that have a plan year commencing before the end of PBGC's fiscal year 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 including the parallel the processing phase). 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 trustee plans and the net liability for plans pending termination and trusteeship. The PVFB liability (including trustee 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) **Trustee 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 trustee by PBGC prior to fiscal year-end. Assets are shown separately from liabilities for trustee plans.

(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 trustee plans, the liability for plans pending termination and trusteeship is shown net of plan assets.

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

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

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

In addition, a reserve for small unidentified probable losses is recorded for the estimated future contingent losses stemming from insured single-employer plans with an aggregate underfunding of less than \$50 million. The reserve is based on the 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. (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, PBGC's exposure to losses from plans of companies that are classified as reasonably possible is disclosed in the footnotes. In order for a plan sponsor to be specifically classified as reasonably possible, it must first have \$50 million or more of underfunding, as well as meet additional criteria. Criteria used for classifying a company as reasonably possible include, but are not limited to, one or more of the following conditions: the plan sponsor is in Chapter 11 reorganization; a funding waiver is pending or outstanding with the Internal Revenue Service; the sponsor missed a minimum funding contribution; the sponsor's bond rating is below investment-grade for Standard & Poor's (BB+) or Moody's (Ba1); or the sponsor has no bond rating but the Dun & Bradstreet Financial Stress Score is below the threshold considered to be investment grade (see Note 9).

PRESENT VALUE OF NONRECOVERABLE FUTURE FINANCIAL ASSISTANCE

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

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

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

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

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

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

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

In addition, for small plans (fewer than 2,500 participants), the estimated probable and reasonably possible losses are accrued for the estimated future contingent losses stemming from the multiemployer program. This small plan bulk reserve uses an aggregate method to estimate liability and exposure, rather than reviewing each plan individually, based on the use of seven years of plan termination history to project the current probable liability. The small plan probabilities 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 exposure.

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

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

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

ADMINISTRATIVE EXPENSES

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

OTHER EXPENSES

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

LOSSES FROM COMPLETED AND PROBABLE TERMINATIONS

Amounts reported as losses from completed and probable terminations represent the difference as of the actual or expected date of plan termination (DOPT) between the present value of future benefits (including amounts owed under Section 4022(c) of ERISA) assumed, or expected to be assumed, by PBGC, less related

plan assets, and the present value of expected recoveries from sponsors and members of their controlled group (see Note 12). When a plan terminates, the previously recorded probable net claim is reversed and newly estimated DOPT plan assets, recoveries and PVFB are netted and reported on the line “PVFB - Plans pending termination and trusteeship” (this value is usually different from the amount previously reported), with any change in the estimate being recorded in the Statements of Operations and Changes in Net Position. In addition, the plan’s net income from DOPT to the beginning of PBGC’s fiscal year is included as a component of losses from completed and probable terminations for plans with termination dates prior to the year in which they were added to PBGC’s inventory of terminated plans.

ACTUARIAL ADJUSTMENTS AND CHARGES (CREDITS)

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

DEPRECIATION AND AMORTIZATION

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

NOTE 3: INVESTMENTS

Premium receipts are invested through the revolving fund in U.S. Treasury securities. The trust funds include assets that PBGC assumes or expects to assume with respect to terminated plans (e.g., recoveries from sponsors) and investment income thereon. These assets generally are held by custodian banks. The basis and market value of the investments by type are detailed below, as well as related investment profile data. The basis indicated is the cost of the asset if assumed after the date of plan termination or the market value at date of plan termination if the asset was assumed as a result of a plan’s termination. PBGC marks the plan’s assets to market, and any increase or decrease in the market value of a plan’s assets occurring after the date on which the plan is terminated must, by law, be credited to or suffered by PBGC. Investment securities denominated in foreign currency are translated into U.S. dollars at the prevailing exchange rates at period end. 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 market place 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, 2017, TBA receivables were \$440 million and no Bond Forward receivables were reported. In addition, as of September 30, 2017, TBA payables were \$930 million and no Bond Forward payables were reported.

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

<i>(Dollars in millions)</i>	September 30, 2017		September 30, 2016	
	Basis	Market Value	Basis	Market Value
Fixed maturity securities:				
U.S. Government securities	\$29,867	\$29,944	\$25,460	\$27,070
Commercial paper/securities purchased under repurchase agreements	200	200	128	128
Asset backed securities	3,312	3,329	3,815	3,889
Pooled funds				
Domestic	2,642	2,591	1,876	1,827
International	-	-	213	252
Global/other	2	2	-	-
Corporate bonds and other	14,549	15,192	11,783	12,537
International securities	9,049	9,408	11,311	11,589
Subtotal	59,621	60,666	54,586	57,292
Equity securities:				
Domestic	225	253	142	162
International	1,704	1,884	769	794
Pooled funds				
Domestic	9,824	12,880	10,357	11,424
International	7,010	11,728	8,038	11,300
Global/other	3	3	4	4
Subtotal	18,766	26,748	19,310	23,684
Private equity	1,252	606	1,290	721
Real estate and real estate investment trusts	2,804	3,114	2,613	2,963
Insurance contracts and other investments	15	16	72	72
Total ¹	\$82,458	\$91,150 ²	\$77,871	\$84,732

¹ Total includes securities on loan at September 30, 2017, and September 30, 2016, with a market value of \$3,686 million and \$3,037 million, respectively.

² This total of \$91,150 million of investments at market value represents the single-employer assets only.

INVESTMENTS OF MULTIEMPLOYER REVOLVING FUNDS AND MULTIEMPLOYER TRUSTEED PLANS

<i>(Dollars in millions)</i>	September 30, 2017		September 30, 2016	
	Basis	Market Value	Basis	Market Value
Investment securities:				
Fixed U.S. Government securities	\$1,919	\$1,921	\$1,811	\$1,925
Equity securities	-	-	-	-
Total	\$1,919	\$1,921	\$1,811	\$1,925

INVESTMENT PROFILE

	September 30,	
	2017	2016
Fixed Income Assets		
Average Quality	A	A
Average Maturity (years)	14.6	13.2
Duration (years)	10.3	9.4
Yield to Maturity (%)	3.2	2.9
Equity Assets		
Average Price/Earnings Ratio	21.8	21.8
Dividend Yield (%)	2.3	2.5
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 by PBGC investment managers is restricted insofar as portfolios cannot use derivatives to create leverage in the portfolios for which they are responsible. Thus, the portfolios are not permitted to utilize derivatives 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 2017 and 2016, PBGC, through its investment managers, invested in investment products that used various U.S. and non-U.S. derivative instruments. Those products included, but are not limited to: index futures, options, money market futures, government bond futures, interest rate, credit default and total return swaps and swaption (an option on a swap) contracts, stock warrants and rights, debt option contracts, and foreign currency futures, forward and option contracts. Some of these derivatives are traded on organized exchanges and thus bear minimal counterparty risk. The counterparties to PBGC's non-exchange-traded derivative contracts are major financial institutions subject to ISDA (International Swaps and

Derivatives Association, Inc.) master agreements or IFEMAs (International Foreign Exchange Master Agreements) and minimum credit ratings required by investment guidelines. PBGC monitors PBGC's counterparty risk and exchanges collateral under most contracts to further support performance by counterparties. Some of PBGC's non-exchange traded derivative contracts are centrally cleared through a Commodity Futures Trading Commission (CFTC)-recognized clearinghouse and the required margin (collateral) is maintained by the clearinghouse to support the performance by counterparties, which are members of the clearinghouse. A clearinghouse reduces the settlement risks by netting offsetting transactions between multiple counterparties by requiring higher levels of collateral deposits or margin requirements compared to bilateral arrangements. Settlement risks are also reduced by the clearinghouse providing independent valuation of trades and margin, monitoring the credit worthiness of the clearing firms, and providing a guarantee fund, which could be used to cover losses that exceed a defaulting clearing firm's margin on deposit.

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

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

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

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

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

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

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

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

For the fiscal years ended September 30, 2017 and 2016, 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.

Pursuant to the provisions of the FASB Accounting Standards Codification Section 815, *Derivatives and Hedging*, this standard 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 end 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

(Dollars in millions)	Asset Derivative					
	September 30, 2017			September 30, 2016		
	Statements of Financial Position Location	Notional	FMV	Statements of Financial Position Location	Notional	FMV
Futures	Derivative Contracts	\$3,842	\$4	Derivative Contracts	\$3,421	\$2
Swap contracts						
Interest rate swaps	Investments-Fixed	2,047	8	Investments-Fixed	2,866	(14)
Other derivative swaps	Investments-Fixed	985	13	Investments-Fixed	1,683	(19)
Option contracts	Investments-Fixed	3,202	1	Investments-Fixed	220	2
Forwards - foreign exchange	Investments-Fixed	4,812	(10)	Investments-Fixed	13,815	2
	Investments-Equity	-	-	Investments-Equity	-	-

(Dollars in millions)	Liability Derivative					
	September 30, 2017			September 30, 2016		
	Statements of Financial Position Location	Notional	FMV	Statements of Financial Position Location	Notional	FMV
Futures	Derivative Contracts	\$2,262	\$ (25)	Derivative Contracts	\$2,392	\$ (22)
Option contracts	Derivative Contracts	166	(2)	Derivative Contracts	352	(5)

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

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

OFFSETTING OF DERIVATIVE ASSETS FAIR VALUE

(Dollars in millions)	September 30, 2017			September 30, 2016		
	Gross Amount of Recognized Assets	Gross Amounts Offset in Statements of Financial Position	Net Amounts of Assets Presented in Statements of Financial Position	Gross Amount of Recognized Assets	Gross Amounts Offset in Statements of Financial Position	Net Amounts of Assets Presented in Statements of Financial Position
<u>Derivatives</u>						
Interest-rate contracts	\$ 2	\$ 0*	\$ 2	\$ 3	\$ (1)	\$ 2
Foreign exchange contracts	30	(20)	10	58	(34)	24
Other derivative contracts ⁽¹⁾	7	0*	7	6	(4)	2
Cash collateral nettings	-	-	-	-	(4)	(4)
Total Derivatives	\$ 39	\$ (20)	\$ 19	\$ 67	\$ (43)	\$ 24
<u>Other financial instruments⁽²⁾</u>						
Repurchase agreements	\$ 242	\$ -	\$ 242	\$ 100	\$ -	\$ 100
Securities lending collateral	3,106	-	3,106	1,910	-	1,910
Total derivatives and other financial instruments	\$3,387	\$ (20)	\$ 3,367	\$ 2,077	\$ (43)	\$ 2,034

(Dollars in millions)	September 30, 2017			September 30, 2016		
	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	242	-	242	100	-	100
Security lending collateral	3,106	(3,106)	-	1,910	(1,910)	-
Total	\$ 3,348	\$ (3,106)	\$ 242	\$ 2,010	\$ (1,910)	\$ 100

* 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

(Dollars in millions)	September 30, 2017			September 30, 2016		
	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
<u>Derivatives</u>						
Interest-rate contracts	\$ 0*	\$ 0*	\$ 0*	\$ 2	\$ (1)	\$ 1
Foreign exchange contracts	41	(20)	21	55	(34)	21
Other derivative contracts ⁽¹⁾	3	0*	3	26	(4)	22
Cash collateral nettings	-	12	12	-	-	-
Total Derivatives	\$ 44	\$ (8)	\$ 36	\$ 83	\$ (39)	\$ 44
<u>Other financial instruments⁽²⁾</u>						
Resale agreements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Securities lending collateral	3,106	-	3,106	1,910	-	1,910
Total derivatives and other financial instruments	\$3,150	\$ (8)	\$3,142	\$ 1,993	\$ (39)	\$ 1,954

(Dollars in millions)	September 30, 2017			September 30, 2016		
	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	3,106	(3,106)	-	1,910	(1,910)	-
Total	\$ 3,106	\$ (3,106)	\$ -	\$ 1,910	\$ (1,910)	\$ -

* 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, 2017, and September 30, 2016.

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

	Location of Gain or (Loss) Recognized in Income on Derivatives	Amount of Gain or (Loss) Recognized in Income on Derivatives	
<i>(Dollars in millions)</i>		Sept. 30, 2017	Sept. 30, 2016
Futures			
Contracts in a receivable position	Investment Income-Fixed	\$32	(\$107)
Contracts in a receivable position	Investment Income-Equity	-	-
Contracts in a payable position	Investment Income-Fixed	(87)	239
Contracts in a payable position	Investment Income-Equity	-	-
Swap agreements			
Interest rate swaps	Investment Income-Fixed	37	(13)
Other derivative swaps	Investment Income-Fixed	29	(6)
Option contracts			
Options purchased (long)	Investment Income-Fixed	4	1
Options purchased (long)	Investment Income-Equity	-	-
Options written (sold short)	Investment Income-Fixed	1	3
Options written (sold short)	Investment Income-Equity	0 *	-
Forward contracts			
Forwards - foreign exchange	Investment Income-Fixed	255	(75)
	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, 2017, and through September 30, 2016, was \$3,576 million and \$2,170 million, respectively. The average value of lendable securities was \$26,754 million through September 30, 2017, and \$24,770 million through September 30, 2016. 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 13% through September 30, 2017 and 9% through September 30, 2016. The average utilization rate increase is due to an increase in utilization of U.S. Corporate Bonds and Equities and U.S. Government Securities as discussed below.

The average value of U.S. Corporate Bonds and Equity securities on loan through September 30, 2017, was \$2,036 million, as compared to \$1,301 million through September 30, 2016. The average value of U.S. Corporate Bonds and Equity securities on loan is 57% of the \$3,576 million average value of securities on loan through September 30, 2017, as compared to 60% of the \$2,170 million average value of securities on loan through September 30, 2016. The average value of lendable U.S. Corporate Bonds and Equity securities was \$17,485 million through September 30, 2017, or 65 percent of PBGC's overall average value of lendable securities; while the average value of lendable U.S. Corporate Bonds and Equity securities was \$14,618 million through September 30, 2016, or 59 percent of PBGC's overall average value of lendable securities. The average utilization of U.S. Corporate Bonds and Equity securities was 12% through September 30, 2017 and 9% through September 30, 2016.

The average value of U.S. Government securities on loan through September 30, 2017, was \$1,421 million, as compared to \$750 million through September 30, 2016. The average value of U.S. Government securities on loan was 40% of the \$3,576 million average value of securities on loan through September 30, 2017, as compared to 35% of the \$2,170 million average value of securities on loan through September 30, 2016. The average value of lendable U.S. Government securities through September 30, 2017, was \$4,578 million, or 17 percent of PBGC's overall average value of lendable securities; whereas the average value of lendable U.S. Government securities through September 30, 2016, was \$4,674 million, or 19 percent of PBGC's overall average value of lendable securities. The average utilization of U.S. Government securities was 31% through September 30, 2017 and 16% through September 30, 2016. The increase in utilization of U.S. Government securities was driven by an increase in their price volatility, which drives demand to borrow. There was also an increase in demand for high quality liquid assets due to regulation of broker dealers.

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, 2017	Sept. 30, 2017 Average Utilization Rates	Sept. 30, 2016 Average Utilization Rates
U.S. Corporate Bond & Equity	11%	12%	9%
U.S. Government Securities	28%	31%	16%
Non-U.S. Corporate Bond & Equity	3%	2%	4%
Non- U.S. Fixed Income	3%	3%	2%
Total PBGC Program	13%	13%	9%

The amount of cash collateral received for securities on loan at September 30, 2017, and September 30, 2016, was \$3,106 million and \$1,910 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 \$15 million from its agency securities lending programs as of September 30, 2017. Also contributing to PBGC's securities lending income is its participation in certain pooled index funds. Net income from securities lending is included in "Investment income – Fixed" on the Statements of Operations and Changes in Net Position.

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

REPURCHASE AGREEMENTS

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

As of September 30, 2017, PBGC had \$242 million in repurchase agreements. This amount represents maturities of one day and is reported as an asset and included in the "Cash and cash equivalents" balance. There was no associated liability for these secured borrowings reported as "Securities sold under repurchase agreements." PBGC has no restrictions placed on the cash received for all of its outstanding repurchase agreements as of September 30, 2017.

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 or Changes in Net Position and Statements of Financial Position.

Amounts in the table below represent the derivative contracts in a receivable position at financial statement date. Collateral deposits of \$80 million, which represent cash paid as collateral on certain derivative contracts, are shown below.

DERIVATIVE CONTRACTS

<i>(Dollars in millions)</i>	September 30, 2017	September 30, 2016
Open receivable trades on derivatives:		
Collateral deposits	\$80 ¹	\$103 ²
Futures contracts	4	2
Interest rate swaps	29	9
Other derivative swaps	99	10
Total	<u>\$212</u>	<u>\$124</u>

¹ Where a legally enforceable master netting agreement exists, collateral deposits receivable for derivative contracts will include counterparty netting. Collateral deposits receivable of \$80 million are the result of \$87 million gross collateral deposits receivable less \$7 million collateral deposits payable netted for swap derivative counterparties.

² For fiscal year 2016, where a legally enforceable master netting agreement exists, collateral deposits receivable for derivative contracts will include counterparty netting. Collateral deposits receivable of \$103 million are the result of \$135 million gross collateral deposits receivable less \$32 million collateral deposits receivable netted for swap derivative counterparties.

Amounts in the Derivative Contracts table below represent derivative contracts in a payable position at financial statement date, 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

<i>(Dollars in millions)</i>	September 30, 2017	September 30, 2016
Open payable trades on derivatives:		
Collateral deposits	\$19 ¹	\$4 ²
Futures contracts	25	22
Interest rate swaps	15	8
Other derivative swaps	100	10
Options-fixed income	2	5
Total	<u>\$161</u>	<u>\$49</u>

¹ Where a legally enforceable master netting agreement exists, collateral deposits payable for derivative contracts will include counterparty netting. Collateral deposits payable of \$19 million are the result of \$26 million gross collateral deposits payable less \$7 million collateral deposits payable netted for swap derivative counterparties.

² For fiscal year 2016, where a legally enforceable master netting agreement exists, collateral deposits payable for derivative contracts will include counterparty netting. Collateral deposits payable of \$4 million are the result of \$36 million gross collateral deposits payable less \$32 million collateral deposits receivable netted for swap derivative counterparties.

NOTE 5: FAIR VALUE MEASUREMENTS

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

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

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

PBGC believes that its valuation techniques and underlying assumptions used to measure fair value conform to the provisions of Section 820. PBGC has categorized the financial assets and liabilities that PBGC carries

at fair value in the Statements of Financial Position based upon the standard's valuation hierarchy. The hierarchy gives the highest priority to quoted prices in active markets for identical assets or liabilities (Level 1), the next highest priority to pricing methods with significant observable market inputs (Level 2), and the lowest priority to significant unobservable valuation inputs (Level 3).

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

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

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

- Quoted prices for similar assets or liabilities in active markets. This includes cash equivalents, securities lending collateral, U.S. Government securities, asset backed securities, fixed foreign investments, corporate bonds, repos, 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, 2017

<i>(Dollars in millions)</i>	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	\$ 505	\$ 4,829	-	\$ 5,334
Securities lending collateral ⁴	-	3,106	-	3,106
Investments:				
Fixed maturity securities				
U.S. Government securities	-	31,865	-	
Commercial paper/securities purchased under repurchase agreements	-	200	-	
Asset backed/Mortgage backed securities	-	3,329	-	
Pooled funds				
Domestic	13	2,504	74	
International	-	-	-	
Global/other	2	-	-	
Corporate bonds and other	0*	15,192	-	
International securities	<u>(10)</u>	<u>9,418</u>	<u>-</u>	
Total fixed maturity securities	5	62,508	74	62,587
Equity securities:				
Domestic	200	53	0*	
International	1,879	5	0*	
Pooled funds				
Domestic	16	12,864	-	
International	4	11,724	-	
Global/other	<u>3</u>	<u>-</u>	<u>-</u>	
Total equity securities	2,102	24,646	0*	26,748
Private equity			606	606
Real estate and real estate investment trusts	1,167	1,689	258	3,114
Insurance contracts and other Investments	-	-	16	16
Receivables: ¹				
Derivative contracts ²	4	208	-	212
Liabilities				
Payables: ¹				
Derivative contracts ³	26	135	-	161

*Less than \$500,000.

¹ Where a legally enforceable master netting agreement exists, amounts for "Receivables: Derivative contracts" and "Payables: Derivative contracts" will include counterparty netting against Level 2 financial assets and liabilities. The Collateral deposits associated with these related open receivables are \$80 million (\$87 million gross collateral deposits receivable less \$7 million collateral deposits payable to derivative counterparties). The Collateral deposits associated with the related open payables are \$19 million (\$26 million gross collateral deposits payable less \$7 million collateral deposits payable from derivative counterparties).

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

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

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

As of September 30, 2017, 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, 2017

<i>(Dollars in millions)</i>	Fair Value at September 30, 2016	Total Realized and Unrealized Gains (Losses) included in Income	Purchases	Sales	Transfers Into Level 3	Transfers Out of Level 3	Fair Value at September 30, 2017	Change in Unrealized Gains (Losses) Related to Financial Instruments held at September 30, 2017 ²
Assets:								
Fixed	\$ -	0*	3	(3)	-	-	\$ -	\$ -
Pooled funds (fixed)	\$106	(32)	-	-	-	-	\$ 74	\$ (32)
Domestic/Int'l equity ¹	\$ 0*	0*	0*	0*	0*	-	\$ 0*	\$ 0*
Private equity	\$721	(88)	76	(103)	-	-	\$606	\$ (78)
Real estate & real estate investment trusts	\$321	(21)	2	(44)	0*	-	\$258	\$ (21)
Other	\$ 22	2	4	(12)	-	-	\$ 16	\$ 1

* Less than \$500,000.

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

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

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

INVESTMENTS IN CERTAIN ENTITIES THAT CALCULATE NET ASSET VALUE PER SHARE (OR ITS EQUIVALENT) FOR THE YEAR ENDED SEPTEMBER 30, 2017

	Fair Value (in millions)	Unfunded Commitments ¹	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
Real estate (a)	\$ 3,114	\$ 48	n/a	n/a
Private equity (b)	606	100	n/a	n/a
Pooled funds (c)	27,204	-	n/a	n/a
Total	<u>\$ 30,924</u>	<u>\$148</u>		

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

- a. This class includes 107 real estate investments that invest primarily in U.S. commercial real estate, and to a lesser extent, U.S. residential real estate. The fair value of each individual investment in this class has been estimated using the net asset value of PBGC's ownership interest in partners' capital. Generally, these investments do not have redemption provisions. Distributions from each fund will be received as the underlying assets of the fund will be liquidated over the next 10 years or so. In addition, distributions will also include any periodic income distributions received. No fund investments in this class are planned to be sold. Individual portfolio investments will be sold over time, but those have not yet been determined.
- b. This class includes 383 private market investments that invest primarily in U.S. buyout and U.S. venture capital funds. A small number of those focus on natural resources. These investments do not have redemption provisions. Instead, the nature of the investments in this class is that distributions are received through the liquidation of the underlying assets of the funds. If these investments were held, it is estimated that the underlying assets of the fund would be liquidated over the next 12 years. However, the individual investments that will be sold have not yet been determined. The fair value of each individual investment has been estimated using the net asset value of PBGC's ownership interest in partners' capital.
- c. This class includes investments in unit trusts that are intended to match returns of domestic and international indices. Units reflect a pro-rata share of the fund's investments. The per unit net asset value is determined each business day based on the fair value of the fund's investments. Issuances and redemptions are possible daily when a per unit value is determined and are based upon the closing per unit net asset value.

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

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

HYPOTHETICAL AND ACTUAL INTEREST FACTOR SENSITIVITY CALCULATIONS OF PVFB SINGLE-EMPLOYER TRUSTEED PLANS AND MULTIEMPLOYER PROGRAM¹

September 30, 2017 <i>(Dollars in millions)</i>	Sensitivity Factors Curve of One-Year Discount Rates (Interest Factors) - Varies Annually from 0.54% in year 1 for 30 years, 1.44% thereafter)	Official Factors² Curve of One-Year Discount Rates (Interest Factors) - Varies Annually from 1.54% in year 1 for 30 years, 2.44% thereafter)	Sensitivity Factors Curve of One-Year Discount Rates (Interest Factors) - Varies Annually from 2.54% in year 1 for 30 years, 3.44% thereafter)
Single-Employer Program	\$121,218	\$108,253	\$ 97,588
Multiemployer Program	81,176	67,283	56,208
Total	\$202,394	\$175,536	\$153,796

¹ Level 3 Fair Value Measurements.

² Actual factors and PVFB amounts calculated for September 30, 2017, fiscal year-end financial statements.

NOTE 6: PRESENT VALUE OF FUTURE BENEFITS

The PVFB is the estimated liability for future pension benefits that PBGC is or will be obligated to pay for trusted 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.

As of March 31, 2017, PBGC changed the methodology for determining interest factors from prior years. Specifically, PBGC now uses a curve of one-year discount rates (interest factors) instead of select and ultimate factors used previously. PBGC surveys life insurance industry annuity prices through the American Council of Life Insurers (ACLI) to obtain input needed to determine interest factors and then derives a 30 year curve of one-year rates that together with PBGC's mortality table will best match the private sector prices from surveys. Any curve of interest factors will generate liability amounts that differ from the survey prices, which cover 14 different ages or benefit timings for both male and female annuitants. The PBGC process derives the curve of interest factors that differs least over the range of prices in the survey. The derived rates in the curve are structured as "forward" rates, not "spot" rates, because of the way they are applied in the present value calculations. For example, in a forward rate structure, discounting a payment due 25 years in the future requires use of 25 different rates, each associated with a one-year period, rather than by discounting using the single rate associated with year 25.

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

CURVE OF ONE-YEAR DISCOUNT RATES (INTEREST FACTORS) AS OF SEPTEMBER 30, 2017

Year 1 – 1.54%	Year 6 – 2.79%	Year 11 – 2.73%	Year 16 – 2.56%	Year 21 – 2.41%	Year 26 – 2.04%
Year 2 – 1.69%	Year 7 – 2.92%	Year 12 – 2.64%	Year 17 – 2.63%	Year 22 – 2.39%	Year 27 – 2.07%
Year 3 – 2.07%	Year 8 – 2.93%	Year 13 – 2.55%	Year 18 – 2.76%	Year 23 – 2.16%	Year 28 – 2.02%
Year 4 – 2.45%	Year 9 – 2.87%	Year 14 – 2.51%	Year 19 – 2.95%	Year 24 – 1.84%	Year 29 – 2.12%
Year 5 – 2.62%	Year 10 – 2.84%	Year 15 – 2.53%	Year 20 – 3.16%	Year 25 – 1.83%	Year 30 – 2.53%
Remaining Years – 2.44%					

For September 30, 2016, PBGC used a 20-year select interest factor of 2.27% followed by an ultimate factor of 2.14% thereafter. These factors were determined to be those needed (given the mortality assumptions), to continue to match the survey of annuity prices provided by the American Council of Life Insurers (ACLI). Both the interest factor and the length of the select period may vary to produce the best fit with these prices. The prices reflect rates at which, in PBGC's opinion, the liabilities (net of administrative expenses) could be settled in the market at September 30, for the respective year, for single-premium nonparticipating group annuities issued by private insurers. Many factors including Federal Reserve policy, changing expectations about longevity risk, and competitive market conditions may affect these rates.

As of June 30, 2017, PBGC changed the methodology for projecting future mortality improvement. Specifically, PBGC now uses a fully generational mortality projection scale instead of the static mortality improvement scales of the past. The mortality tables PBGC used for September 30, 2017 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-2016 respectively. For September 30, 2016, PBGC used the same tables projected to 2029 using the MP-2015 scale. The number of years that PBGC projected the mortality table for September 30, 2016 reflected the number of years from the base year of the table to the end of the fiscal year (2 years), plus PBGC's calculated duration of its liabilities in the previous fiscal year (13 years).

PBGC utilized the results of its 2016 mortality study in determining the mortality assumptions outlined above. The study removed the margins used in previous studies and provided the most current mortality tables which best matched PBGC's seriatim population experience. PBGC has now adopted a more current base mortality table (RP-2014) that better reflects actual PBGC mortality experience. The ACLI survey of annuity prices, when combined with the mortality table, provides the basis for determining the interest factors used in calculating the PVFB.

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

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

The PVFB for trustee multiemployer plans for FY 2017 and FY 2016 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 on the following page 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, 2017, and for the fiscal year ended September 30, 2016.

RECONCILIATION OF THE PRESENT VALUE OF FUTURE BENEFITS FOR THE YEARS ENDED
SEPTEMBER 30, 2017 AND 2016

	September 30,	
<i>(Dollars in millions)</i>	2017	2016
Present value of future benefits, at beginning		
of year -- Single-Employer, net	\$113,704	\$106,926
Estimated recoveries, prior year	568	475
Assets of terminated plans pending trusteeship, net, prior year	279	447
Present value of future benefits at beginning of year, gross	114,551	107,848
Settlements and judgments, prior year	(21)	(26)
Net claims for probable terminations, prior year	(376)	(585)
Actuarial adjustments -- underwriting:		
Changes in method and assumptions	\$ (720)	\$2,598
Effect of experience	(578)	(313)
Total actuarial adjustments -- underwriting	(1,298)	2,285
Actuarial charges -- financial:		
Expected interest	2,532	2,929
Change in interest factors	(2,183)	6,301
Total actuarial charges -- financial	349	9,230
Total actuarial charges, current year	(949)	11,515
Terminations:		
Current year	997	2,307
Changes in prior year	(169)	(1,246)
Total terminations	828	1,061
Benefit payments, current year ¹	(5,699)	(5,659)
Estimated recoveries, current year	(278)	(568)
Assets of terminated plans pending trusteeship, net, current year	(36)	(279)
Settlements and judgments, current year ²	18	21
Net claims for probable terminations:		
Future benefits ³	7,917	653
Estimated plan assets and recoveries from sponsors	(4,675)	(277)
Total net claims, current year	3,242	376
Present value of future benefits,		
at end of year -- Single-Employer, net	111,280	113,704
Present value of future benefits,		
at end of year -- Multiemployer	0*	0*
Total present value of future benefits, at end of year, net	\$111,280	\$113,704

* Less than \$500,000 (actual amount is \$132,338 and \$199,930 for the 10 Pre-MPPA trustee multiemployer plans at September 30, 2017, and September 30, 2016, respectively).

1. The benefit payments of \$5,699 million at September 30, 2017, and \$5,659 million at September 30, 2016, include \$13 million in FY 2017 and \$67 million in FY 2016, 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 is \$18 million at September 30, 2017, as compared to \$21 million at September 30, 2016.
3. The future benefits for probable terminations of \$7,917 million and \$653 million for the periods ending September 30, 2017, and September 30, 2016, include \$139 million and \$127 million, respectively, for probable terminations not specifically identified, and \$7,778 million and \$526 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

<i>(Dollars in millions)</i>	September 30, 2017		September 30, 2016	
	Basis	Market Value	Basis	Market Value
U.S. Government securities	\$ -	\$ -	\$ -	\$ -
Corporate and other bonds	15	15	156	156
Equity securities	21	21	168	168
Private equity	-	-	-	-
Insurance contracts	0 *	0 *	0 *	0 *
Other	-	-	(45)	(45)
Total, net	\$36	\$36	\$ 279	\$ 279

* Less than \$500,000

NET CLAIMS FOR PROBABLE TERMINATIONS

Factors that at present are not fully determinable may be responsible for why these claim estimates differ from actual experience. Included in net claims for probable terminations is a provision for future benefit liabilities for plans not specifically identified. This reserve for small unidentified probable losses is recorded for the estimated future contingent losses stemming from insured single-employer plans with an aggregate underfunding of less than \$50 million. The reserve is based on the historic three-year rolling average of actual plan terminations (with an aggregate underfunding of less than \$50 million) and indexed to the S&P 500 to reflect changes in economic conditions. The September 30, 2017, Net Claims for Probable Terminations is \$3,242 million, of which \$3,103 million is from a specific identification process and \$139 million is from the reserve for small unidentified probable losses.

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

RECONCILIATION OF NET CLAIMS FOR PROBABLE TERMINATIONS

<i>(Dollars in millions)</i>	September 30,	
	2017	2016
Net claims for probable terminations, at beginning of year	\$ 376	\$ 585
New claims	\$ 3,103	\$ 249
Actual terminations	(231)	(382)
Deleted probables	(18)	(40)
Change in benefit liabilities	12	(36)
Change in plan assets	-	-
Loss (credit) on probables	2,866	(209)
Net claims for probable terminations, at end of year	\$3,242	\$ 376

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

PROBABLES EXPOSURE BY INDUSTRY (PRINCIPAL CATEGORIES)

<i>(Dollars in millions)</i>	FY 2017	FY 2016
Retail	\$ 2,421	\$ -
Manufacturing	615	249
Forest Product	67	-
Total	<u>\$ 3,103</u>	<u>\$ 249</u>

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

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

ACTUAL PROBABLES EXPERIENCE

As Initially Recorded Beginning in 1987

<i>(Dollars in millions)</i>	Status of Probables from 1987-2016 at September 30, 2017				
Beginning in 1987, number of plans reported as Probable:	Number of Plans		Percent of Plans	Net Claim	Percent of Net Claim
Probables terminated	379		79%	\$30,450	72%
Probables not yet terminated or deleted	-		-	-	-
Probables deleted	103		21%	12,032	28%
Total	482		100%	\$42,482	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

<i>(Dollars in millions)</i>	September 30, 2017	September 30, 2016
Gross balance at beginning of year	\$1,036	\$923
Financial assistance payments	141	113
Financial assistance - premiums waived	3	0 *
Write-offs related to settlement agreements	0 *	0 *
Subtotal	<u>1,180</u>	<u>1,036</u>
Allowance for uncollectible amounts	<u>(1,180)</u>	<u>(1,036)</u>
Net balance at end of year	<u>\$ -</u>	<u>\$ -</u>

* Less than \$500,000

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. Losses from 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 or are about to begin receiving financial assistance. In addition, a change in the valuation of the liability due to new data received (e.g., new plan expenses, more recent valuation liabilities, and new withdrawal payment schedules) is included as financial assistance from insolvent and probable plans on the Statements of Operations and Changes in Net Position. This valuation data change is a separate line item from actuarial adjustments and actuarial charges.

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

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

As of September 30, 2017, the Corporation expects that 187 individually identified multiemployer plans 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 187 plans is \$67,283 million (inclusive of the reserve for small ongoing plan losses not individually identified). The 187 plans fall into three categories: (1) plans currently receiving financial assistance; (2) plans that have terminated but have not yet started receiving financial assistance from PBGC; and (3) ongoing plans (not terminated) that the Corporation expects will require financial assistance in the future. The latter two categories comprise multiemployer probables as defined by the following classification criteria:

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

MULTIEMPLOYER FINANCIAL ASSISTANCE

<i>(Dollars in millions)</i>	September 30, 2017		September 30, 2016	
	Number of Plans	Net Liability	Number Of Plans	Net Liability
Plans currently receiving financial assistance	72	\$2,662	65	\$2,139
Plans that have terminated but have not yet started receiving financial assistance (classified as probable)	68	1,966	63	1,986
Ongoing plans (not terminated) that the Corporation expects will require financial assistance in the future (classified as probable)	47	62,655 ¹	40	56,884 ¹
Total	187	\$67,283	168	\$61,009

¹ Ongoing plans include a small probable bulk reserve of \$1,080 million and \$1,011 million for September 30, 2017, and September 30, 2016, respectively.

Of the 187 plans:

- 1) 72 have exhausted plan assets and are currently receiving financial assistance payments from PBGC. The present value of future financial assistance payments for these insolvent 72 plans is \$2,662 million.
- 2) 68 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 68 terminated plans is \$1,966 million.
- 3) 47 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 47 ongoing plans is \$62,655 million.

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

<i>(Dollars in millions)</i>	September 30, 2017	September 30, 2016
Balance at beginning of year	\$61,009	\$54,186
Changes in allowance:		
Losses from insolvent and probable plans - financial assistance	6,438	6,768
Actuarial adjustments	(40)	11
Actuarial charges (credits) - Insolvent plans:		
Due to expected interest	62	56
Due to change in interest factors	(45)	101
Financial assistance granted (previously accrued)	(141)	(113)
Balance at end of period	<u>\$67,283</u>	<u>\$61,009</u>

In the table above, actuarial charges are reported separately from “Losses 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 from insolvent and probable plans-financial assistance” include plans that terminated but have not yet received financial assistance, ongoing plans that PBGC expects will require financial assistance in the future, and those insolvent plans that have a change in liability due to new plan data included in the valuation.

NOTE 8: ACCOUNTS PAYABLE AND ACCRUED EXPENSES

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

ACCOUNTS PAYABLE AND ACCRUED EXPENSES

<i>(Dollars in millions)</i>	September 30, 2017	September 30, 2016
Annual leave	\$10	\$ 10
Other payables and accrued expenses	65	66
Accounts payable and accrued expenses	<u>\$75</u>	<u>\$ 76</u>

NOTE 9: REASONABLY POSSIBLE CONTINGENCIES

SINGLE-EMPLOYER PLANS

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

In accordance with the FASB Accounting Standards Codification Section 450, *Contingencies*, PBGC classified a number of these companies that sponsor plans with total unfunded vested benefits greater than \$50 million as

reasonably possible rather than probable terminations, reflecting the sponsors' financial condition and other factors that did not indicate termination of their plans was likely. This classification was done based upon information about the companies as of September 30, 2017. PBGC criteria for a single-employer plan sponsor to be classified as Reasonably Possible are:

- a. The sponsor(s) or significant member(s) of its controlled group (e.g., a parent or major subsidiary) is in reorganization under Title 11 of the United States Code.
- b. An application for a funding waiver is pending or outstanding with the IRS.
- c. A minimum funding contribution has been missed.
- d. The sponsor(s) has an S&P senior unsecured credit rating or an issuer credit rating less two notches of BB+ or below, or a Moody's senior unsecured credit rating or a corporate family rating less one notch of Ba1 or below. If the controlled group is not rated by Moody's and S&P, PBGC will use the Dun & Bradstreet Financial Stress Score (if available) to classify the controlled group as Reasonably Possible or Remote.
- e. The sponsor(s) has no bond rating, but analysis indicates that its unsecured debt would be below investment grade.
- f. The sponsor(s) meet 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, 2016. The reasonably possible exposure to loss was \$238,188 million for FY 2017. This is an increase of \$14,913 million from the reasonably possible exposure of \$223,275 million in FY 2016. This increase is primarily due to the decrease in the interest factors used for valuing liabilities.

Except in the rare circumstances indicated earlier in this note, the estimate of unfunded vested benefits exposure to loss is not generally based on PBGC-guaranteed benefit levels, since data is not available to determine an estimate at this level of precision. PBGC calculated this estimate, as in previous years, by using the most recent data available from filings and submissions to the Corporation for plan years ended on or after December 31, 2015. PBGC adjusted the value reported for liabilities to December 31, 2016, using a select rate of 2.12% for the first 20 years and 2.61% thereafter and applying the expense load as defined in 29 CFR Part 4044, Appendix C. The rates were derived in conjunction with the 1994 Group Annuity Mortality Static Table (with margins) projected to 2026 using Scale AA to approximate annuity prices as of December 31, 2016. The underfunding associated with these plans could be substantially different at September 30, 2017, because of changes in economic conditions between December 31, 2016, and September 30, 2017. PBGC did not adjust the estimate for events that occurred between December 31, 2016, and September 30, 2017.

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

REASONABLY POSSIBLE EXPOSURE TO LOSS BY INDUSTRY
(PRINCIPAL CATEGORIES)

<i>(Dollars in millions)</i>	FY 2017	FY 2016
Manufacturing ¹	\$93,139	\$85,798
Transportation, Communication and Utilities ²	62,729	56,961
Services	36,590	36,066
Wholesale and Retail Trade	12,296	12,141
Health Care	12,273	11,450
Finance, Insurance, and Real Estate	11,614	12,782
Agriculture, Mining, and Construction	9,547	8,077
Total	\$238,188	\$223,275

¹ Primarily automobile/auto parts and fabricated metals.

² Primarily airlines.

MULTIEMPLOYER PLANS

There are many multiemployer plans that may require future financial assistance. PBGC included amounts in the liability for the present value of nonrecoverable future financial assistance (see Note 7) for multiemployer plans that PBGC estimated may require future financial assistance. In addition, PBGC estimated as of September 30, 2017, that it is reasonably possible that other multiemployer plans may require future financial assistance in the amount of \$13,972 million.

PBGC calculated the future financial assistance liability for each multiemployer plan identified as probable (see Note 7), or reasonably possible. PBGC used a formula taking the present value of guaranteed future benefits and expense payments net of any future contributions or withdrawal liability payments. These amounts were as of the later of September 30, 2017, or the projected (or actual, if known) date of plan insolvency, discounted back to September 30, 2017. PBGC's identification of plans that are likely to require such assistance and estimation of related amounts required consideration of many complex factors, including estimating future cash flows, future mortality rates, and age of participants not in pay status. These factors are affected by future events, including actions by plans and their sponsors, most of which are beyond PBGC's control. Reasonably possible multiemployer classification is defined as an ongoing plan with a projected insolvency date between 10 and 20 years from the valuation date.

To determine the probable liability, ongoing plans are divided into segments based on the number of plan participants with different processes by plan size (see Note 7). The reserve for small unidentified probable losses (fewer than 2,500 participants) uses an aggregate method to estimate liability and exposure, rather than reviewing each plan individually, based on the use of seven years of plan termination history to project the current probable liability. The reasonably possible exposure is derived from the total exposure for high risk plans by subtracting the probable liability for small plans. For mid-sized plans (2,500 to 35,000 participants), risk-based rules are applied using a cash-flow model. For large plans (more than 35,000 participants), PBGC identifies ongoing high-risk plans for a projection of the date of insolvency to measure the reasonably possible exposure.

NOTE 10: COMMITMENTS

PBGC leases its office facility under a commitment that began on January 1, 2005, and expires December 10, 2018. This lease provides for periodic rate increases based on increases in operating costs and real estate taxes over a base amount. In addition, PBGC is leasing space for field benefit administrators. These leases began in

1996 and expire in 2021. The minimum future lease payments for office facilities having noncancellable terms in excess of one year as of September 30, 2017, are:

COMMITMENTS: FUTURE LEASE PAYMENTS

<i>(Dollars in millions)</i>	
Years Ending September 30,	Operating Leases
2018	\$ 14.6
2019	0.6
2020	0.4
2021	0.1
Minimum lease payments	<u>\$ 15.7</u>

In addition to the committed minimum operating lease payments of \$15.7 million as noted in the table above, PBGC has estimated future uncommitted operating leases of approximately \$68 million.

Lease expenses were \$20.0 million in FY 2017 and \$19.9 million in FY 2016.

NOTE 11: PREMIUMS

For both the single-employer and multiemployer programs, ERISA provides that PBGC shall continue 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 2017, the per-participant flat rate premium was \$69 for single-employer pension plans, \$28 for multiemployer plans. For plan years 2016 and 2015, the per-participant flat rate premiums for single-employer pension plans were \$64 and \$57, respectively, and for multiemployer plans, \$27 and \$26, respectively.

Single-employer plans also owe a variable rate premium (VRP) tied to the amount of underfunding. For plans years beginning in 2017, the VRP rate was \$34 per \$1,000 of unfunded vested benefits subject to an overall cap of \$517 per participant. For plan years 2016 and 2015, the VRP rates were \$30 and \$24 respectively. Applicable caps for those plan years are shown in the table below.

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

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

Net premium income for FY 2016 was \$6,661 million and consisted of \$4,639 million in variable rate premiums, \$2,026 million in flat rate premiums, \$9 million interest and penalty income, and \$5 million in termination premiums, offset by a bad debt expense of \$18 million. Bad debt expenses include a reserve for uncollectible premium receivables (including flat, variable, termination premiums, and multiemployer insolvent plans), interest, and penalties.

Illustrated in the table below, on a plan year basis, is the flat rate and variable rate premium information for the single-employer and multiemployer programs:

Plan Years Beginning on or after January 1	Single-Employer Plans			Multiemployer Plans
	Flat Rate Premium	Variable Rate Premium		Flat Rate Premium Rate Per Participant
	Rate Per Participant	Rate per \$1,000 UVBs	Per Participant Cap	
2017	\$69	\$34	\$517	\$28
2016	\$64	\$30	\$500	\$27
2015	\$57	\$24	\$418	\$26

Premium income is accrued for months in which a plan year overlaps the fiscal year. Because of this rule, premiums for 2015, 2016, and 2017 plan years are accrued in FY 2017, and premium rates change each calendar year, so three sets of premium rates were used to calculate FY 2017 premium revenue.

For example, consider a plan with a September 1, 2016 to August 31, 2017 plan year only the first month of that plan year occurs during FY 2016, so 1/12th of the plan's premium for this plan year was accrued in FY 2016 and 11/12th accrued in FY 2017. Similarly, for a plan with a December 1, 2015 to November 30, 2016 plan year, the last two months of that plan year occurs during FY 2017, so 2/12th of the plan's premium income is accrued in FY 2017 and 10/12th was accrued in FY 2016.

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

Net Premiums Receivable

	Single-Employer		Multiemployer		Memorandum Total	
(Dollars in Million)	Sept. 30, 2017	Sept. 30, 2016	Sept. 30, 2017	Sept. 30, 2016	Sept. 30, 2017	Sept. 30, 2016
Premiums Not Yet Due:						
Estimated Flat-Rate Premiums	\$1,086	\$1,035	\$160	\$155	\$1,246	\$1,190
Estimated Variable-Rate Premiums	2,918	3,154	-	-	2,918	3,154
Total Net Premiums Not Yet Due	4,004	4,189	160	155	4,164	4,344
Premiums Past Due:						
Flat-Rate Premiums	126	136	20	10	146	146
Allowance for Bad Debt-Flat-Rate	(3)	(7)	0 *	0 *	(3)	(7)
Variable-Rate Premiums	299	207	-	-	299	207
Allowance for Bad Debt-Variable-Rate	(6)	(10)	-	-	(6)	(10)
Total Net Premiums Past Due	416	326	20	10	436	336
Termination Premiums: ¹						
Termination Premiums	251	249	-	-	251	249
Allowance for Bad Debt-Termination	(233)	(234)	-	-	(233)	(234)
	18	15	-	-	18	15
Interest and Penalty:						
Interest and Penalty Due	2	5	0 *	0 *	2	5
Allowance for Bad Debt-Int/Penalty	(1)	(1)	0 *	0 *	(1)	(1)
Total Net Interest and Penalty Due	1	4	0 *	0 *	1	4
Grand Total Net Premiums Receivable	\$4,439	\$4,534	\$180	\$165	\$4,619	\$4,699

* Less than \$500,000

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

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

PREMIUM INCOME BY PREMIUM TYPE

(Dollars in Million)	September 30, 2017	September 30, 2016
Flat-Rate Premium:		
Single-Employer	\$1,785	\$1,742
Multiemployer	292	284
Total Flat-Rate Premium	2,077	2,026
Variable-Rate Premiums	4,948	4,639
Interest and Penalty Income	2	9
Termination Premium	3	5
Less Bad Debts for Premiums, Interest, and Penalties	0 *	(18)
Total Net Premiums	\$7,030	\$6,661

* Less than \$500,000

PREMIUM INCOME BY PROGRAM

(Dollars in Million)	September 30, 2017	September 30, 2016
Single-Employer:		
Flat-Rate and Variable-Rate Premiums	\$6,732	\$6,381
Interest and Penalty Income	2	9
Termination Premiums	3	5
Less Bad Debts for Premiums, Interest, and Penalties	2	(16)
Total Single-Employer	6,739	6,379
Multiemployer:		
Flat-Rate Premiums	293	284
Interest and Penalty Income	0 *	0 *
Less Bad Debts for Premiums, Interest, and Penalties	(2)	(2)
Total Multiemployer	291	282
Total Net Premiums	\$7,030	\$6,661

* Less than \$500,000

NOTE 12: LOSSES FROM COMPLETED AND PROBABLE TERMINATIONS

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

LOSSES FROM COMPLETED AND PROBABLE TERMINATIONS – SINGLE-EMPLOYER PROGRAM

(Dollars in millions)	For the Years Ended September 30,					
	New Terminations	2017 Changes in Prior Years' Terminations ⁵	Total	New Terminations	2016 Changes in Prior Years' Terminations ⁵	Total
Present value of future benefits	\$ 997	\$(169)	\$828	\$2,307	\$(1,246)	\$1,061
Less plan assets	471	299	770	1,332	(27)	1,305
Plan asset insufficiency	526	(468)	58	975	(1,219)	(244)
Less estimated recoveries	-	(290)	(290)	-	(30)	(30)
Subtotal	526 ¹	(178)	348	975 ¹	(1,189)	(214)
Settlements and judgments		2 ⁶	2 ⁶		6 ⁶	6 ⁶
Loss (credit) on probables	(231) ²	2,944 ³	2,713 ⁴	(382) ²	173 ³	(209) ⁴
Total	\$ 295	\$ 2,768	\$3,063	\$ 593	\$ (1,010)	\$ (417)

¹ Gross amounts for plans terminated during the period (76 plans at September 30, 2017 and 67 plans at September 30, 2016), including plans previously recorded as probables.

² Net claims for plans previously recorded as probables that terminated.

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

⁴ See Note 6 - includes \$231 million at September 30, 2017, and \$382 million at September 30, 2016, previously recorded relating to plans that terminated during the period ("Actual terminations").

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

⁶ PBGC determined that it is highly unlikely more than half of the total potential future Page/Collins settlement liability will be paid. Accordingly, PBGC estimates that the PBGC's future Page/Collins settlement liability is \$18 million at September 30, 2017, as compared to \$21 million at September 30, 2016.

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						
	Single-Employer Program	Multiemployer Program	Memorandum Total	Single-Employer Program	Multiemployer Program	Memorandum Total
<i>(Dollars in millions)</i>	Sept. 30, 2017	Sept. 30, 2017	Sept. 30, 2017	Sept. 30, 2016	Sept. 30, 2016	Sept. 30, 2016
Fixed maturity securities:						
Interest earned	\$1,886	\$38	\$1,924	\$1,739	\$38	\$1,777
Realized gain (loss)	351	11	362	1,204	32	1,236
Unrealized gain (loss)	(1,613)	(102)	(1,715)	2,837	73	2,910
Total fixed maturity securities	624	(53)	571	5,780	143	5,923
Equity securities:						
Dividends earned	87	-	87	47	-	47
Realized gain (loss)	775	-	775	2,213	-	2,213
Unrealized gain (loss)	3,591	-	3,591	508	-	508
Total equity securities	4,453	-	4,453	2,768	-	2,768
Private equity:						
Distributions earned	4	-	4	6	-	6
Realized gain (loss)	204	-	204	255	-	255
Unrealized gain (loss)	(79)	-	(79)	(180)	-	(180)
Total private equity	129	-	129	81	-	81
Real estate:						
Distributions earned	-	-	-	-	-	-
Realized gain (loss)	185	-	185	67	-	67
Unrealized gain (loss)	(40)	-	(40)	(60)	-	(60)
Total real estate	145	-	145	7	-	7
Other income:						
Distributions earned	10	-	10	12	-	12
Realized gain (loss)	1	-	1	-	-	-
Unrealized gain (loss)	1	-	1	-	-	-
Total other income	12	-	12	12	-	12
Total investment income	\$5,363	(\$53)	\$5,310	\$8,648	\$143	\$8,791

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.

PBGC's contribution to the CSRS plan for FY 2017 was 32.8 percent and 33.5 percent for FY 2016 of base pay for those employees covered by that system. For those employees covered by FERS, the Corporation's contribution was 14.7 percent of base pay for FY 2017. For employees covered by FERS-RAE, the Corporation's contribution was 15.3 percent of base pay for FY 2017. For employees covered by FERS-FRAE, the Corporation's contribution was 15.4 percent of base pay for FY 2017. In addition, for FERS-covered employees, FERS-RAE covered employees, and FERS-FRAE covered employees, PBGC automatically contributes 1 percent of base pay to the employee's Thrift Savings account, matches the first 3 percent contributed by the employee and matches one-half of the next 2 percent contributed by the employee. Total retirement plan expenses amounted to \$26 million in FY 2017, an increase of \$2 million from FY 2016. 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 investment activity. Sales and purchases of investments are driven by the level of newly trusted 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 MULTIPLE EMPLOYER PROGRAMS COMBINED)

(Dollars in millions)	September 30,	
	2017	2016
Proceeds from sales of investments:		
Fixed maturity securities	\$98,490	\$69,594
Equity securities	5,040	10,908
Other/uncategorized	2,788	3,288
Memorandum total	<u>\$106,318</u>	<u>\$83,790</u>
Payments for purchases of investments:		
Fixed maturity securities	\$(102,976)	\$(74,671)
Equity securities	(4,278)	(7,719)
Other/uncategorized	(1,984)	(1,890)
Memorandum total	<u>\$(109,238)</u>	<u>\$(84,280)</u>

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,	
	2017	2016	2017	2016	2017	2016
<i>(Dollars in millions)</i>						
Net income (loss)	\$9,666	\$3,485	\$(6,219)	\$(6,549)	\$3,447	\$(3,064)
Adjustments to reconcile net income to net cash provided by operating activities:						
Net (appreciation) decline in fair value of investments	(3,302)	(6,758)	109	(91)	(3,193)	(6,849)
Net (gain) loss of plans pending termination and trusteeship	28	(21)	-	-	28	(21)
Losses (credits) on completed and probable terminations	3,063	(417)	-	-	3,063	(417)
Actuarial charges (credits)	(950)	11,515	-	-	(950)	11,515
Benefit payments - trustee plans	(5,686)	(5,592)	-	-	(5,686)	(5,592)
Settlements and judgments	(5)	(11)	-	-	(5)	(11)
Cash received from plans upon trusteeship	20	25	-	-	20	25
Receipts from sponsors/non-sponsors	712	88	-	-	712	88
EL/DUEC Trusteeship interest (non-cash)	(183)	62	-	-	(183)	62
Cash receipts timing from Trust to Revolving	-	6	-	-	-	6
Amortization of discounts/premiums	76	(76)	7	(7)	83	(83)
Amortization and Depreciation expense	13	13	-	-	13	13
Bad debt expense/Write-offs (net)	26	4	-	-	26	4
Changes in assets and liabilities, net of effects of trustee and pending plans:						
(Increase) decrease in receivables	41	(1,209)	(15)	(13)	26	(1,222)
Increase in present value of nonrecoverable future financial assistance	-	-	6,274	6,823	6,274	6,823
Increase (decrease) in unearned premiums	54	29	1	(1)	55	28
Increase (decrease) in accounts payable	(3)	(2)	2	7	(1)	5
Net cash provided (used) by operating activities	\$3,570	\$1,141	\$159	\$169	\$3,729	\$1,310

NOTE 16: LITIGATION

Legal challenges to PBGC's policies and positions continued in FY 2017. At the end of the fiscal year, PBGC had 21 active cases in state and federal courts and 196 bankruptcy and state receivership cases.

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

NOTE 17: SUBSEQUENT EVENTS

Management evaluated subsequent events through publication on November 15, 2017, 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, 2017, and before the financial statements were available to be issued, that provided additional evidence about conditions that existed at September 30, 2017, have been recognized in the financial statements.

For the fiscal year ended September 30, 2017, 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, 2017, and which arose before the financial statements were available to be issued.

Audit of the Pension Benefit Guaranty Corporation's
Fiscal Year 2017 and 2016 Financial Statements

Audit Report AUD-2018-4/ FA-17-119-1

Section III

Management Comments

This page intentionally left blank.



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

Office of the Director

NOV 15 2017

MEMORANDUM

To: Robert Westbrooks
Inspector General

From: W. Thomas Reeder *W. Thomas Reeder*
Director

Subject: Response to the Independent Auditor's Combined Audit Report for the
FY 2017 Financial Statement Audit

Thank you for the opportunity to comment on the Office of Inspector General's FY 2017 audit results regarding the agency's financial statements, internal controls, and compliance with laws and regulations. PBGC protects the pensions of millions of Americans, so it is especially noteworthy that our financial statements have once again received an unmodified opinion.

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

cc: Patricia Kelly
Cathleen Kronopolus
Alice Maroni
Karen Morris
Ann Orr
Michael Rae
Robert Scherer
Judith Starr
Martin O. Boehm
Theodore J. Winter