

TEACHERS INSURANCE AND ANNUITY ASSOCIATION OF AMERICA

Audited Statutory – Basis Financial Statements as of December 31, 2017 and 2016 and for the three years ended December 31, 2017

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Report of Independent Auditors

To the Board of Trustees of Teachers Insurance and Annuity Association of America

We have audited the accompanying statutory-basis financial statements of Teachers Insurance and Annuity Association of America, which comprise the statutory-basis statements of admitted assets, liabilities and capital and contingency reserves as of December 31, 2017 and 2016, and the related statutory-basis statements of operations and changes in capital and contingency reserves, and of cash flows for each of the three years in the period ended December 31, 2017.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of the statutory-basis financial statements in accordance with the accounting practices prescribed or permitted by the New York State Department of Financial Services. Management is also responsible for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of statutory-basis financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on the statutory-basis financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the statutory-basis 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 our judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the Company's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Basis for Adverse Opinion on U.S. Generally Accepted Accounting Principles

As described in Note 2 to the statutory-basis financial statements, the statutory-basis financial statements are prepared by the Company on the basis of the accounting practices prescribed or permitted by the New York State Department of Financial Services, which is a basis of accounting other than accounting principles generally accepted in the United States of America.



The effects on the statutory-basis financial statements of the variances between the statutory basis of accounting described in Note 2 and accounting principles generally accepted in the United States of America, although not reasonably determinable, are presumed to be material.

Adverse Opinion on U.S. Generally Accepted Accounting Principles

In our opinion, because of the significance of the matter discussed in the "Basis for Adverse Opinion on U.S. Generally Accepted Accounting Principles" paragraph, the statutory-basis financial statements referred to above do not present fairly, in accordance with accounting principles generally accepted in the United States of America, the financial position of the Company as of December 31, 2017 and 2016, or the results of its operations or its cash flows for each of the three years in the period ended December 31, 2017.

Opinion on Statutory Basis of Accounting

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In our opinion, the statutory-basis financial statements referred to above present fairly, in all material respects, the admitted assets, liabilities and capital and contingency reserves of the Company as of December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in accordance with the accounting practices prescribed or permitted by the New York State Department of Financial Services described in Note 2.

New York, New York March 14, 2018

TEACHERS INSURANCE AND ANNUITY ASSOCIATION OF AMERICA STATUTORY - BASIS STATEMENTS OF ADMITTED ASSETS, LIABILITIES AND CAPITAL AND CONTINGENCY RESERVES

	December 31,						
		2017		2016			
ADMITTED ASSETS		(in mi	llions)				
Bonds	\$	184,895	\$	185,216			
Preferred stocks		338		170			
Common stocks		5,680		3,391			
Mortgage loans		26,597		21,101			
Real estate		2,078		2,230			
Cash, cash equivalents and short-term investments		640		605			
Contract loans		1,680		1,587			
Derivatives		244		526			
Securities lending collateral assets		706		649			
Other long-term investments		30,165		27,512			
Investment income due and accrued		1,794		1,787			
Net deferred federal income tax asset		1,964		3,208			
Other assets		770		703			
Separate account assets		37,596		33,757			
TOTAL ADMITTED ASSETS	\$	295,147	\$	282,442			
LIABILITIES, CAPITAL AND CONTINGENCY RESERVES Liabilities Reserves for life and health insurance, annuities and deposit-type contracts Dividends due to policyholders Interest maintenance reserve	\$	207,664 1,884 2,136	\$	201,447 1,932 1,706			
Federal income taxes payable		2,130		1,700			
Asset valuation reserve		5,388		4,167			
Derivatives		470		4,107 62			
Payable for collateral for securities loaned		706		649			
Other liabilities		2,981		3,137			
Separate account liabilities		37,565		33,737			
TOTAL LIABILITIES		258,811		246,859			
Capital and Contingency Reserves							
Capital (2,500 shares of \$1,000 par value common stock issued and outstanding and \$550,000 paid-in capital)		3		3			
Surplus notes		5,041		4,000			
Contingency reserves:							
For investment losses, annuity and insurance mortality, and other risks		31,292		31,580			
TOTAL CAPITAL AND CONTINGENCY RESERVES		36,336		35,583			
TOTAL LIABILITIES, CAPITAL AND CONTINGENCY RESERVES	\$	295,147	\$	282,442			

TEACHERS INSURANCE AND ANNUITY ASSOCIATION OF AMERICA STATUTORY - BASIS STATEMENTS OF OPERATIONS

	For the Years Ended December 31,												
		2017		2016		2015							
	(in millions)												
REVENUES													
Insurance and annuity premiums and other considerations	\$	16,644	\$	16,595	\$	13,659							
Annuity dividend additions		1,503		1,970		1,574							
Net investment income		11,875		11,907		11,335							
Other revenue		371		325		289							
TOTAL REVENUES	\$	30,393	\$	30,797	\$	26,857							
BENEFITS AND EXPENSES													
Policy and contract benefits	\$	16,206	\$	14,385	\$	14,575							
Dividends to policyholders		3,212		3,813		3,334							
Increase in policy and contract reserves		6,115		7,461		3,922							
Net operating expenses		2,123		1,620		1,643							
Net transfers to separate accounts		1,123		1,851		1,725							
TOTAL BENEFITS AND EXPENSES	\$	28,779	\$	29,130	\$	25,199							
Income before federal income taxes and net realized capital gains (losses)	\$	1,614	\$	1,667	\$	1,658							
Federal income tax expense (benefit)		(4)		16		(83)							
Net realized capital gains (losses) less capital gains taxes, after transfers to the interest maintenance reserve		(598)		(161)		(487)							
NET INCOME	\$	1,020	\$	1,490	\$	1,254							

TEACHERS INSURANCE AND ANNUITY ASSOCIATION OF AMERICA STATUTORY - BASIS STATEMENTS OF CHANGES IN CAPITAL AND CONTINGENCY RESERVES

	and Ad	al Stock Iditional Capital	Surp	olus Notes		ntingency eserves	Total	
				(in mi				
Balance, December 31, 2014	\$	3	\$	4,000	\$	29,917 \$	33,920	
Net income				_		1,254	1,254	
Change in net unrealized capital gains on investments		_		_		(1,433)	(1,433)	
Change in asset valuation reserve		_		_		1,110	1,110	
Change in net deferred income tax		_		_		(160)	(160)	
Change in post-retirement benefit liability		_		_		1	1	
Change in non-admitted assets:								
Deferred federal income tax asset		_		_		147	147	
Other assets		_		_		(104)	(104)	
Balance, December 31, 2015	\$	3	\$	4,000	\$	30,732 \$	34,735	
Net income		_		_		1,490	1,490	
Change in net unrealized capital losses on investments		_		_		(481)	(481)	
Change in asset valuation reserve				_		(257)	(257)	
Change in net deferred income tax				_		(272)	(272)	
Change in post-retirement benefit liability		_		_		4	4	
Change in non-admitted assets:								
Deferred federal income tax asset				_		271	271	
Other assets				_		93	93	
Balance, December 31, 2016	\$	3	\$	4,000	\$	31,580 \$	35,583	
Net income		_		_		1,020	1,020	
Change in net unrealized capital losses on investments		_		_		1,070	1,070	
Change in asset valuation reserve		_		_		(1,221)	(1,221)	
Change in net deferred income tax		_		_		(4,554)	(4,554)	
Change in post-retirement benefit liability				_		(5)	(5)	
Change in non-admitted assets:						()	()	
Deferred federal income tax asset		_		_		3,310	3,310	
Other assets		_		_		92	92	
Change in surplus notes		_		1,041		_	1,041	
Balance, December 31, 2017	\$	3	\$	5,041	\$	31,292 \$	36,336	

TEACHERS INSURANCE AND ANNUITY ASSOCIATION OF AMERICA STATUTORY - BASIS STATEMENTS OF CASH FLOWS

	For the Years Ended December 31,						
•	2017	2016	2015				
CASH FROM OPERATIONS		(in millions)					
Insurance and annuity premiums and other considerations	16,650	16,599	13,666				
Net investment income	11,301	11,324	10,776				
Miscellaneous income	361	317	281				
Total receipts	28,312	28,240	24,723				
Policy and contract benefits	16,128	14,449	14,211				
Operating expenses	1,729	1,560	1,756				
Dividends paid to policyholders	1,756	1,819	1,794				
Federal income tax expense (benefit)	(16)	15	(108)				
Net transfers to separate accounts	1,127	1,814	1,726				
Total disbursements	20,724	19,657	19,379				
Net cash from operations	7,588	8,583	5,344				
CASH FROM INVESTMENTS							
Proceeds from investments sold, matured, or repaid:							
Bonds	27,267	25,064	22,145				
Stocks	1,298	529	819				
Mortgage loans and real estate	1,464	2,342	2,419				
Other invested assets	2,213	2,314	2,624				
Miscellaneous proceeds	52	622	333				
Cost of investments acquired:							
Bonds	25,622	28,844	23,440				
Stocks	3,489	1,005	1,167				
Mortgage loans and real estate	6,684	4,593	6,145				
Other invested assets	3,923	4,457	4,047				
Miscellaneous applications	1,076	191	254				
Net cash used in investments	(8,500)	(8,219)	(6,713)				
CASH FROM FINANCING AND OTHER							
Proceeds from issuance of surplus notes	1,994	_	_				
Extinguishment of surplus notes	(950)	_	_				
Premium paid on extinguishment of surplus notes	(373)	_	_				
Net deposits on deposit-type contracts funds	24	(7)	20				
Other cash provided (applied)	252	(285)	340				
Net cash from (used in) financing and other	947	(292)	360				
NET CHANGE IN CASH, CASH EQUIVALENTS AND SHORT-TERM INVESTMENTS	35	72	(1,009)				
CASH, CASH EQUIVALENTS AND SHORT-TERM INVESTMENTS, BEGINNING OF YEAR	605	533	1,542				
CASH, CASH EQUIVALENTS AND SHORT-TERM INVESTMENTS, END OF YEAR	640	605	533				

Note 1 - Organization

Teachers Insurance and Annuity Association of America ("TIAA" or the "Company") was established in 1918 as a legal reserve life insurance company under the insurance laws of the State of New York. All of the outstanding common stock of TIAA is held by the TIAA Board of Overseers ("Board of Overseers"), a not-for-profit corporation incorporated in the State of New York originally created for the purpose of holding the stock of TIAA.

The Company's primary purpose is to aid and strengthen non-profit educational and research organizations, governmental entities and other non-profit institutions by providing retirement and insurance benefits for their employees and their families and by counseling such organizations and their employees on benefit plans and other measures of economic security.

Note 2 - Significant Accounting Policies

Basis of Presentation:

The financial statements of Teachers Insurance and Annuity Association of America ("TIAA" or the "Company") are presented on the basis of statutory accounting principles prescribed or permitted by the New York State Department of Financial Services ("NYDFS" or the "Department"). The Department requires insurance companies domiciled in the State of New York to prepare their statutory-basis financial statements in accordance with the National Association of Insurance Commissioners' ("NAIC") Accounting Practices and Procedures Manual ("NAIC SAP"), subject to any deviation prescribed or permitted by the Department ("New York SAP").

The table below provides a reconciliation of the Company's net income and capital and contingency reserves between NAIC SAP and the New York SAP annual statement filed with the Department. The additional reserve for the term conversions results from the Department requiring in Regulation No. 147 (11NYCRR 98) Valuation of Life Insurance Reserves Section 98.4 for any policy which guarantees renewal, or conversion to another policy, without evidence of insurability, additional reserves shall be held that account for excess mortality due to anti-selection with appropriate margins to cover expenses and risk of moderately adverse deviations in experience.

			For the Years Ended December 31,								
•	SSAP#	F/S Line		2017 2016				2015			
•					(in	millions)		,			
Net income, NAIC SAP				1,021		1,491		1,254			
New York SAP Prescribed Practices that is an increase/(decrease) from NAIC SAP:											
Additional reserves for term conversions	51R	Increase in policy and contract reserves		(1)		(1)		_			
Net income, New York SAP	0111	10001100	•	1,020	\$	1,490	\$	1,254			
Net income, New York SAI			<u> </u>	1,020	Ψ	1,430	Ψ	1,204			
Capital and Contingency Reserves, NAIC SAP			\$	36,358	\$	35,604	\$	34,755			
New York SAP Prescribed Practices that is an increase/(decrease) from NAIC SAP:											
Additional reserves for:											
		Reserves for life and health insurance, annuities and									
Additional reserves for term conversions	51R	deposit-type contracts		(22)		(21)		(20)			
Capital and contingency reserves, New York SAP			\$	36,336	\$	35,583	\$	34,735			

The Company's risk based capital as of December 31, 2017 and 2016 would not have triggered a regulatory event without the use of the New York SAP prescribed practices.

Accounting Principles Generally Accepted in the United States: The Financial Accounting Standards Board ("FASB") dictates the accounting principles for financial statements that are prepared in conformity with GAAP with applicable authoritative accounting pronouncements. As a result, the Company cannot refer to financial statements prepared in accordance with NAIC SAP and New York SAP as having been prepared in accordance with GAAP.

The primary differences between GAAP and NAIC SAP can be summarized as follows:

Under GAAP:

- Investments in bonds considered to be "available for sale" are carried at fair value under GAAP rather than at amortized cost under NAIC SAP;
- Impairments on securities (other than loan-backed and structured securities) due to credit losses are recorded as other-than-temporary impairments ("OTTI") through earnings for the difference between amortized cost and discounted cash flows when a security is deemed impaired. Other declines in fair value related to factors other than credit are recorded as other comprehensive income, which is a separate component of stockholder's equity. Under NAIC SAP, an impairment for such securities is recorded through earnings for the difference between amortized cost and fair value;
- For loan-backed and structured securities that are other-than-temporarily impaired, declines in fair value related
 to factors other than credit are recorded as other comprehensive income, which is a separate component of
 stockholder's equity. Under NAIC SAP, such declines in fair value are not recorded until a credit loss occurs;
- Changes in the allowance for estimated uncollectible amounts related to mortgage loans are recorded through earnings under GAAP rather than as unrealized losses on impairments included in the Asset Valuation Reserve, which is a component of surplus under NAIC SAP;
- Changes in the value of certain other long-term investments accounted for under the equity method of accounting
 are recorded through earnings under GAAP rather than as unrealized gains (losses), which is a component of
 surplus under NAIC SAP;
- Investments in wholly-owned subsidiaries, other entities under the control of the parent, and certain variable
 interest entities are consolidated in the parent's financial statements rather than being carried at the parent's
 share of the underlying GAAP equity or statutory surplus of a domestic insurance subsidiary;
- Contracts that contain an embedded derivative are bifurcated from the host contract and accounted for separately
 under GAAP, whereas under NAIC SAP, the embedded derivative is not bifurcated between components and is
 accounted for as part of the host contract;
- Certain assets designated as "non-admitted assets" and excluded from assets in the statutory balance sheet are included in the GAAP balance sheet;
- Surplus notes are reported as a liability rather than a component of capital and contingency reserves;
- The Asset Valuation Reserve ("AVR") is eliminated as it is not recognized under GAAP. The AVR is established
 under NAIC SAP with changes recorded as a direct charge to surplus;
- The Interest Maintenance Reserve ("IMR") is eliminated as it is not recognized under GAAP. The realized gains
 and losses resulting from changes in interest rates are reported as a component of net income under GAAP rather
 than being deferred and subsequently amortized into income over the remaining expected life of the investment
 sold;
- Dividends on participating policies are accrued when earned under GAAP rather than being recognized for the year when they are approved;

- Policy acquisition costs, such as commissions, and other costs incurred in connection with acquiring new business, are deferred and amortized over the expected lives of the policies issued under GAAP rather than being expensed when incurred;
- Policy and contract reserves are based on management's best estimates of expected mortality, morbidity, persistency and interest under GAAP rather than being based on statutory mortality, morbidity and interest requirements;
- Deferred income taxes, subject to valuation allowance, include federal and state income taxes and changes in the deferred tax are reflected in earnings. Under NAIC SAP, deferred taxes exclude state income taxes and are admitted to the extent they can be realized within three years subject to a 15% limitation of capital and surplus with changes in the net deferred tax reflected as a component of surplus;
- Contracts that do not subject the Company to risks arising from policyholder mortality or morbidity are reported
 as a deposit liability. Under NAIC SAP, contracts that have any mortality and morbidity risk, regardless of
 significance, and contracts with life contingent annuity purchase rate guarantees are classified as insurance
 contracts and amounts received under these contracts are reported as revenue;
- Assets and liabilities are reported gross of reinsurance under GAAP and net of reinsurance under NAIC SAP.
 Certain reinsurance transactions are accounted for as financing transactions under GAAP and as reinsurance
 under NAIC SAP. Transactions recorded as financing have no impact on premiums or losses incurred, while
 under NAIC SAP, premiums paid to the reinsurer are recorded as ceded premiums (a reduction in revenue) and
 expected reimbursement for losses from the reinsurer are recorded as a reduction in losses;
- When reserves ceded to an unauthorized reinsurer exceed the assets or letters of credit supporting the reserves
 no liability is established under GAAP. Under NAIC SAP, a liability is established and changes to these amounts
 are credited or charged directly to unassigned surplus (deficit).

The effects of these differences, while not determined, are presumed to be material.

Use of Estimates: The preparation of statutory-basis financial statements requires management to make estimates and assumptions that impact the reported amounts of assets and liabilities at the date of the financial statements. Management is also required to disclose contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Actual results may differ from those estimates.

The most significant estimates include those used in the recognition of other-than-temporary impairments, reserves for life and health insurance, annuities and deposit-type contracts and the valuation of deferred tax assets.

Accounting Policies:

The following is a summary of the significant accounting policies followed by the Company:

Bonds: Bonds are stated at amortized cost using the constant yield method. Bonds in or near default (rated NAIC 6) are stated at the lower of amortized cost or fair value. NAIC ratings are applied to bonds and other securities. Categories 1 and 2 are considered investment grade, while Categories 3 through 6 are considered below investment grade. Bonds are recorded on a trade date basis, except for private placement bonds, which are recorded on the funding date. Bonds the Company intends to sell prior to maturity ("held for sale") are stated at the lower of amortized cost or fair value. Exchange Traded Funds identified in the Purposes and Procedures Manual of the NAIC Investment Analysis Office as qualifying for bond treatment are stated at fair value.

Pursuant to the NAIC adopted modifications to SSAP No. 26R, *Bonds*, which were effective December 31, 2017, the Company holds Securities Valuations Office ("SVO") identified bond exchange traded funds ("ETFs"). These ETFs are reported at fair value, and the Company has not elected systematic value.

Included within bonds are loan-backed and structured securities. Estimated future cash flows and expected prepayment speeds are used to determine the amortization of loan-backed and structured securities under the prospective method. Expected future cash flows and prepayment speeds are evaluated quarterly. Certain loan-backed and structured securities are reported at the lower of amortized cost or fair value as a result of the NAIC modeling process.

If it is determined that a decline in the fair value of a bond, excluding loan-backed and structured securities, is other-than-temporary, the cost basis of the bond is written down to fair value and the amount of the write down is accounted for as a realized loss. The new cost basis is not changed for subsequent recoveries in fair value. Future declines in fair value which are determined to be other-than-temporary are recorded as realized losses.

For loan-backed and structured securities which the Company has the intent and ability to hold for a period of time sufficient to recover the amortized cost basis, when an OTTI has occurred because the Company does not expect to recover the entire amortized cost basis of the security, the amount of the OTTI recognized as a realized loss is the difference between the security's amortized cost basis and the present value of cash flows expected to be collected, discounted at the loan-backed or structured security's effective interest rate.

For loan-backed and structured securities, when an OTTI has occurred because the Company intends to sell the security or does not have the intent and ability to retain the security for a period of time sufficient to recover the amortized cost basis, the amount of the OTTI realized is the difference between the security's amortized cost basis and fair value at the balance sheet date.

In periods subsequent to the recognition of an OTTI loss for a loan-backed or structured security, the Company accounts for the other-than-temporarily impaired security as if the security had been purchased on the measurement date of the impairment. The difference between the new amortized cost basis and the cash flows expected to be collected is accreted as interest income in future periods based on prospective changes in cash flow estimates.

Preferred Stocks: Preferred stocks are stated at amortized cost unless they have an NAIC rating designation of 4, 5, or 6 which are stated at the lower of amortized cost or fair value. The fair value of preferred stocks is determined using prices provided by independent pricing services or internally developed pricing models. When it is determined that a decline in fair value of an investment is other-than-temporary, the cost basis of the investment is reduced to its fair value and the amount of the reduction is accounted for as a realized loss.

Common Stocks: Unaffiliated common stocks are stated at fair value, which is based on quoted market prices, where available. Changes in fair value are recorded through surplus as an unrealized gain or loss. For common stocks without quoted market prices, fair value is estimated using independent pricing services or internally developed pricing models. When it is determined that a decline in fair value of an investment is other-than-temporary, the cost basis of the investment is reduced to its fair value and the amount of the reduction is accounted for as a realized loss.

Investments in wholly-owned subsidiaries are stated at the value of their underlying net assets as follows: (1) domestic insurance subsidiaries are stated at the value of their underlying statutory surplus, and (2) non-insurance subsidiaries are stated at the value of their underlying audited GAAP equity. Dividends and distributions from subsidiaries are recorded in investment income to the extent they are not in excess of the investee's undistributed accumulated earnings, and changes in the equity of subsidiaries are recorded directly to surplus as unrealized gains or losses.

Mortgage Loans: Mortgage loans are stated at amortized cost, net of valuation allowances. Amortized cost consists of the unpaid principal balance of the loans, net of unamortized premiums, discounts, and certain mortgage origination fees. Mortgage loans held for sale are stated at the lower of amortized cost or fair value. Mortgage loans are evaluated for impairment when it is probable that the receipt of contractual payments of principal and interest may not occur when scheduled. If the impairment is considered to be temporary, a valuation allowance is established for the excess of the carrying value of the mortgage over its estimated fair value. Changes in valuation allowance for mortgage loans are included in net unrealized capital gains and losses on investments. When an event occurs resulting in an impairment that is other-than-temporary, a direct write-down is recorded as a realized loss and a new cost basis is established. The fair value of mortgage loans is generally determined using a discounted cash flow methodology based on coupon rates, maturity provisions and credit assumptions.

Real Estate: Real estate occupied by the Company and real estate held for the production of income is carried at depreciated cost, less encumbrances. Real estate held for sale is carried at the lower of depreciated cost or fair value, less encumbrances, and estimated costs to sell. The Company utilizes the straight-line method of depreciation on real estate and it is generally computed over a forty-year period. A real estate property may be considered impaired when events or circumstances indicate that the carrying value may not be recoverable. When the Company determines that an investment in real estate is impaired, a direct write-down is made to reduce the carrying value of the property to its estimated fair value based on an external appraisal, net of encumbrances, and a realized loss is recorded. The Company makes investments in commercial real estate directly, through wholly owned subsidiaries and through real estate limited partnerships. The Company monitors the effects of current and expected market conditions and other factors on its real estate investments to identify and quantify any impairment in value. The Company assesses assets to determine if events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. The Company evaluates the recoverability of income producing investments based on undiscounted cash flows and then reviews the results of an independent third party appraisal to determine the fair value and if an impairment is required.

Other Long-term Investments: Other long-term investments primarily include investments in joint ventures, partnerships, and limited liability companies which are stated at cost, adjusted for the Company's percentage of the most recent available financial statements based on the underlying U.S. GAAP, International Financial Reporting Standards or U.S. Tax basis equity, generally measured at fair value, as reflected on the respective entity's financial statements.

The Company monitors the effects of current and expected market conditions and other factors on these investments to identify and quantify any impairment in value. The Company assesses the investments for potential impairment by performing analysis between the fair value and the cost basis of the investments. The Company evaluates recoverability of the Company's direct investment to determine if OTTI is warranted. When it is determined that a decline in fair value of an investment is other-than-temporary, the cost basis of the investment is reduced to its fair value, and the amount of the reduction is accounted for as a realized loss.

Investments in wholly-owned non-insurance subsidiaries are stated at the value of their underlying audited GAAP equity. Dividends and distributions from subsidiaries are recorded in investment income to the extent they are not in excess of the investee's undistributed accumulated earnings, and changes in the equity of subsidiaries are recorded directly to surplus as unrealized gains or losses.

Other long-term investments include the Company's investments in surplus notes, which are stated at amortized cost. All of the Company's investments in surplus notes have a NAIC 1 rating designation.

Cash and Cash Equivalents: Cash includes cash on deposit and cash equivalents. Cash equivalents are short-term, highly liquid investments with original maturities of three months or less at the date of purchase and are stated at amortized cost.

Short-Term Investments: Short-term investments (investments with remaining maturities greater than three months and less than or equal to 12 months at the time of acquisition, excluding those investments classified as cash equivalents) that are not impaired are stated at amortized cost using the straight line interest method. Short-term investments that are impaired are stated at the lower of amortized cost or fair value.

Contract Loans: Contract loans are stated at outstanding principal balances. The excess of unpaid contract loan balances over the cash surrender value, if any, is non-admitted and reflected as an adjustment to surplus. Interest income on such contract loans is recorded as earned using the contractually agreed upon interest rate.

Derivative Instruments: The Company has filed a Derivatives Use Plan with the Department. This plan details the Company's derivative policy objectives, strategies, controls and any restrictions placed on various derivative types. The plan also specifies the procedures and systems that the Company has established to evaluate, monitor and report on the derivative portfolio in terms of valuation, hedge effectiveness and counterparty credit quality. The Company may use derivative instruments for hedging, income generation, or asset replication purposes.

Derivatives used by the Company may include swaps, forwards, futures or options.

The carrying value of a derivative position may be at cost or fair value, depending on the type of instrument and accounting status. Hedge accounting is applied for some foreign currency swaps that hedge fixed income investments carried at amortized cost. A currency translation adjustment computed at the spot rate is recorded for these foreign currency swaps as an unrealized gain or loss. The derivative component of a Replication (Synthetic Asset) Transaction ("RSAT") is carried at unamortized premiums received or paid, adjusted for any impairments. The cash component of a RSAT is classified as a bond on the Company's balance sheet and carried at amortized cost. Derivatives used in hedging transactions where hedge accounting is not being utilized are carried at fair value. The Company does not offset the carrying value amounts recognized for derivatives executed with the same counterparty under a netting agreement.

Investment Income Due and Accrued: Investment income due is investment income earned and legally due to be paid to the Company at the reporting date. Investment income accrued is investment income earned but not legally due to be paid to the Company until subsequent to the reporting date. The Company writes off amounts deemed uncollectible as a charge against investment income in the period such determination is made. Amounts deemed collectible, but over 90 days past due for any invested asset except mortgage loans in default are non-admitted. Amounts deemed collectible, but over 180 days past due for mortgage loans in default are non-admitted. The Company accrues interest income on impaired loans to the extent it is deemed collectible.

Separate Accounts: Separate Accounts are established in conformity with insurance laws, are segregated from the Company's general account and are maintained for the benefit of separate account contract holders. Separate accounts are accounted for at fair value, except the TIAA Stable Value Separate Account, which supports book value separate account agreements, in which case the assets are accounted for at amortized cost. Separate account liabilities reflect the contractual obligations of the insurer arising out of the provisions of the insurance contract.

Foreign Currency Transactions and Translation: Investments denominated in foreign currencies and foreign currency contracts are valued in U.S. dollars, based on exchange rates at the balance sheet date. Investment transactions in foreign currencies are recorded at the exchange rates prevailing on the respective transaction dates. All other asset and liability accounts denominated in foreign currencies are adjusted to reflect exchange rates at the balance sheet date. Realized and unrealized gains and losses due to foreign exchange transactions and translation adjustments are not separately reported but are collectively included in realized and unrealized capital gains and losses, respectively.

Non-Admitted Assets: For statutory accounting purposes, certain assets are designated as non-admitted assets. Changes in non-admitted assets are reported as a direct adjustment to surplus.

At December 31, the major categories of assets that are non-admitted are as follows (in millions):

	2017		:	2016	C	hange
Net deferred federal income tax asset	\$	3,720	\$	7,030	\$	(3,310)
Furniture and electronic data processing equipment		532		583		(51)
Other long-term investments		126		141		(15)
Receivable from parent, subsidiaries and affiliates		27		28		(1)
Other		202		227		(25)
Total	\$	4,607	\$	8,009	\$	(3,402)

Electronic Data Processing Equipment, Computer Software, Furniture and Equipment and Leasehold Improvements: Electronic data processing ("EDP") equipment, computer software and furniture and equipment which qualify for capitalization are depreciated over the lesser of useful life or 3 years. Office alterations and leasehold tenant improvements which qualify for capitalization are depreciated over the lesser of useful life or 5 years or the remaining life of the lease, respectively.

At December 31, the accumulated depreciation on EDP equipment, computer software, furniture and equipment and leasehold improvements is as follows (in millions):

		2017	2016
EDP equipment and computer software	\$	1,424	\$ 1,588
Furniture and equipment and leasehold improvements	\$	102	\$ 462

Repurchase Agreement: Repurchase agreements are agreements between a seller and a buyer, whereby the seller of securities sells and simultaneously agrees to repurchase the same or substantially the same securities from the buyer at a stated price on a specified date. Repurchase agreements are generally accounted for as secured borrowings. The assets transferred are not removed from the balance sheet; the cash collateral received is reported on the balance sheet with an offsetting liability reported in "Other liabilities."

Securities Lending Program: The Company has a securities lending program whereby it may lend securities to qualified institutional borrowers to earn additional income. The Company receives collateral (in the form of cash) against the loaned securities and maintains collateral in an amount not less than 102% of the market value of loaned securities during the period of the loan. The cash collateral received is reported in "Securities lending collateral assets" with an offsetting collateral liability included in "Payable for collateral for securities loaned." Securities lending income is recorded in the accompanying Statements of Operations in "Net investment income."

Insurance and Annuity Premiums and Other Considerations: Life insurance premiums are recognized as revenue over the premium-paying period of the related policies. Annuity premiums and other considerations, including consideration on annuity product rollovers, are recognized as revenue when received. Deposits on deposit-type contracts are recorded directly as a liability when received. Expenses incurred when acquiring new business are charged to operations as incurred.

Reserves for Life and Health Insurance, Annuities and Deposit-type Contracts: Policy and contract reserves are determined in accordance with standard valuation methods approved by the Department and are computed in accordance with standard actuarial methodology. The reserves established utilize assumptions for interest, mortality and other risks insured. Such reserves are established to provide for adequate contractual benefits guaranteed under policy and contract provisions.

Liabilities for deposit-type contracts, which do not contain any life contingencies, are equal to deposits received and interest credited to the benefit of contract holders, less surrenders or withdrawals (that represent a return to the contract holders) plus additional reserves (if any) necessitated by actuarial regulations.

The Company performed asset adequacy analysis in order to test the adequacy of its reserves in light of the assets supporting such reserves, and determined that its reserves are sufficient to meet its obligations.

Asset Valuation Reserve ("AVR") and Interest Maintenance Reserve ("IMR"): Mandatory reserves have been established for the General Account and Separate Account investments, where required. Such reserves consist of the AVR for potential credit-related losses on applicable General Account and Separate Account invested assets. Changes to the AVR are reported as direct additions to or deductions from surplus. An IMR is established for interest-related realized capital gains (losses) resulting from changes in the general level of interest rates for the General Account, as well as any Separate Accounts, not carried at fair value. Transfers to the IMR are deducted from realized capital gains and losses and are net of related federal income tax. IMR amortization, as calculated under the grouped method, is included in net investment income. Net realized capital gains (losses) are presented net of federal income tax expense or benefit and IMR transfer. For bonds, excluding loan-back and structured securities, losses from other-than-temporary impairments are recorded entirely to either the AVR or the IMR in accordance with the nature of the impairment.

Net Realized Capital Gains (Losses): Realized capital gains (losses), net of taxes, exclude gains (losses) deferred into the IMR and gains (losses) of the separate accounts. Realized capital gains (losses), including OTTI, are recognized in net income and are determined using the specific identification method.

Dividends Due to Policyholders: Dividends on insurance policies and pension annuity contracts in the payout phase are declared by the TIAA Board of Trustees (the "Board") in December of each year, and such dividends are credited to policyholders in the following calendar year. Dividends on pension annuity contracts in the accumulation phase are declared by the Board in February of each year, and such dividends on the various existing vintages of pension annuity contracts in the accumulation phase are credited to policyholders during the ensuing twelve month period beginning March 1.

Federal Income Taxes: Current federal income taxes are charged or credited based upon amounts estimated to be payable or recoverable as a result of operations for the current year and any adjustments to such estimates from prior years. Deferred federal income tax assets ("DTAs") and deferred federal income tax liabilities ("DTLs") are recognized for expected future tax consequences of temporary differences between statutory and taxable income. Temporary differences are identified and measured using a balance sheet approach whereby statutory and tax balance sheets are compared. Changes in DTAs and DTLs are recognized as a separate component of surplus. Net DTAs are admitted to the extent permissible under NAIC SAP. Gross DTAs are reduced by a statutory valuation allowance if it is more likely than not that some portion or all of the gross DTA will not be realized. The Company is required to establish a tax loss contingency if it is more likely than not that a tax position will not be sustained. The amount of the contingency reserve is management's best estimate of the amount of the original tax benefit that could be reversed upon audit, unless the best estimate is greater than 50% of the original tax benefit, in which case the reserve is equal to the entire tax benefit.

The Company files a consolidated federal income tax return with its includable insurance and non-insurance subsidiaries. The consolidating companies participate in tax allocation agreements. The tax allocation agreements provide that each member of the group is allocated its share of the consolidated tax provision or benefit, determined generally on a separate company basis, but may, where applicable, recognize the tax benefits of net operating losses or capital losses utilizable by the consolidated group. Intercompany tax balances are settled quarterly on an estimated basis with a final settlement occurring within 30 days of the filing of the consolidated return. The tax allocation agreements are not applied to subsidiaries that are disregarded under federal tax law.

Statements of Cash Flows: Noncash activities are excluded from the Statutory - Basis Statements of Cash Flows. These noncash activities for the years ended December 31 include the following (in millions):

	 2017		2016	2015	
Exchange/transfer/conversion/distribution of invested assets	\$ 5,003	\$	2,753	\$	4,302
Capitalized interest	 351		310		308
Total	\$ 5,354	\$	3,063	\$	4,610

Application of New Accounting Pronouncements:

In June 2016, the NAIC adopted substantive revisions to SSAP No. 51, *Life Contracts*, to incorporate references to the Valuation Manual ("VM") and to facilitate the implementation of Principles-Based Reserving ("PBR"), which was effective on January 1, 2017. The adoption of PBR will be phased-in over three years, and only applies to new policies issued after the revised Standard Valuation Law and VM are in effect. Under the current system of reserving, formulas and assumptions are used to determine reserves as prescribed by state laws and regulations. Under PBR, companies will hold the higher of (a) the reserve using prescribed methods and assumptions and (b) the PBR reserve which considers a range of future economic conditions, computed using justified company experience factors, such as mortality, policyholder behavior and expenses. The adoption of the modifications to SSAP No. 51 relating to PBR will not affect the in-force block of business issued prior to the effective date.

In August 2016, the NAIC adopted and made effective modifications to SSAP No. 51, *Life Contracts*. These modifications clarify that annual assumption changes from reserving methods used in PBR would not qualify as a change in valuation basis. Changes in valuation basis are recorded directly to surplus instead of through income. This modification was made to accommodate PBR when it becomes effective and subsequent implementations.

The Company's state of domicile, New York, has not yet adopted PBR into law. When New York adopts PBR it will apply to the Company. Until New York adopts PBR, the Company will continue to follow New York requirements,

which are formula based reserves. The Company is still evaluating the NAIC guidance and does not anticipate a material impact on surplus.

In April 2017, the NAIC adopted modifications to SSAP No. 26R, *Bonds*, which were effective December 31, 2017. These modifications remove SVO-identified instruments from the definition of a bond and provide separate statutory accounting guidance for these instruments, commonly referred to as SVO-Identified bond ETFs. The specific guidance for SVO-identified instruments includes a requirement for these instruments to be reported at fair value (using net asset value ("NAV") as a practical expedient), unless the investment qualifies for, and the reporting entity elects, use of a documented systematic value approach in accordance with the guidance. Revisions also incorporate the definition of a security within the definition of a bond, and incorporate definitions for non-bond, fixed-income instruments. These modifications did not have a significant impact on the Company's financial statements.

Note 3 - Long-Term Bonds, Preferred Stocks, and Unaffiliated Common Stocks

The book/adjusted carrying value, estimated fair value, excess of fair value over book/adjusted carrying value and excess of book/adjusted carrying value over fair value of long-term bonds at December 31, is shown below (in millions):

	2017											
				Exce	ess c	of						
	Book/ Adjusted Carrying Value		Fair Value Over Book/Adjusted Carrying Value			ook/Adjusted arrying Value Over Fair Value		Estimated Fair Value				
Bonds:												
U.S. governments	\$	32,407	\$	3,330	\$	(42)	\$	35,695				
All other governments		5,071		473		(15)		5,529				
States, territories and possessions		632		73		(1)		704				
Political subdivisions of states, territories, and possessions		1,058		90		(10)		1,138				
Special revenue and special assessment, non-guaranteed agencies and government		18,353		1,124		(63)		19,414				
Credit tenant loans		9,324		792		(26)		10,090				
Industrial and miscellaneous		116,877		7,697		(432)		124,142				
Hybrids		343		73		(6)		410				
Parent, subsidiaries and affiliates		830		_		(4)		826				
Total	\$	184,895	\$	13,652	\$	(599)	\$	197,948				

2016

	2010											
				Exce								
		Book/ Adjusted Fair Value Over Carrying Book/Adjusted Value Carrying Value			Carr	k/Adjusted ying Value Over air Value		stimated air Value				
Bonds:												
U.S. governments	\$	36,814	\$	3,107	\$	(79)	\$	39,842				
All other governments		4,890		388		(59)		5,219				
States, territories and possessions		715		70		(11)		774				
Political subdivisions of states, territories, and possessions		816		35		(30)		821				
Special revenue and special assessment, non-guaranteed agencies and government		16,612		1,034		(157)		17,489				
Credit tenant loans		8,215		637		(71)		8,781				
Industrial and miscellaneous		115,929		6,187		(1,359)		120,757				
Hybrids		432		57		(17)		472				
Parent, subsidiaries and affiliates		793		_		(7)		786				
Total	\$	185,216	\$	11,515	\$	(1,790)	\$	194,941				

Impairment Review Process: All securities are subjected to the Company's process for identifying OTTI. The Company writes down securities it deems to have an OTTI in value during the period the securities are deemed to be impaired, based on management's case-by-case evaluation of the decline in value and prospects for recovery. Management considers a wide range of factors in the impairment evaluation process, including, but not limited to, the following: (a) the length of time the fair value has been below amortized cost; (b) the financial condition and near-term prospects of the issuer; (c) whether the debtor is current on contractually obligated interest and principal payments; (d) the intent and ability of the Company to retain the investment for a period of time sufficient to allow for any anticipated recovery in fair value or repayment; (e) information obtained from regulators and ratings agencies; (f) the potential for impairments in an entire industry sector or sub-sector; (g) the potential for impairments in certain economically-depressed geographic locations and (h) the potential for impairment based on an estimated discounted cash flow analysis for structured and loan-backed securities. Where impairment is considered to be other-than-temporary, the Company recognizes a realized loss and adjusts the cost basis of the security accordingly. The Company does not change the revised cost basis for subsequent recoveries in value.

Unrealized Losses on Bonds, Preferred Stocks and Unaffiliated Common Stocks: The gross unrealized losses and estimated fair values for securities by the length of time that individual securities are in a continuous unrealized loss position are shown in the table below (in millions):

		Less	than t	welve mo	nths	<u> </u>	Twelve months or more						
	Gross Amortized Unrealized Estimated Cost Loss Fair Value		An	nortized Cost	Uni	iross ealized Loss		stimated air Value					
<u>December 31, 2017</u>													
Loan-backed and structured bonds	\$	4,983	\$	(42)	\$	4,941	\$	6,388	\$	(193)	\$	6,195	
All other bonds		7,234		(111)		7,123		8,123		(278)		7,845	
Total bonds	\$	12,217	\$	(153)	\$	12,064	\$	14,511	\$	(471)	\$	14,040	
Unaffiliated common stocks		121		(4)		117		31		(8)		23	
Total bonds and stocks	\$	12,338	\$	(157)	\$	12,181	\$	14,542	\$	(479)	\$	14,063	

		Less	s thar	n twelve mo	onths	<u> </u>	Twelve months or more						
	An	Amortized Cost		Gross Unrealized Loss		Estimated Fair Value		Amortized Cost		iross ealized .oss		imated r Value	
<u>December 31, 2016</u>													
Loan-backed and structured bonds	\$	11,144	\$	(333)	\$	10,811	\$	2,457	\$	(137)	\$	2,320	
All other bonds		28,164		(970)		27,194		4,182		(370)		3,812	
Total bonds	\$	39,308	\$	(1,303)	\$	38,005	\$	6,639	\$	(507)	\$	6,132	
Unaffiliated common stocks		177		(7)		170		118		(21)		97	
Total bonds and stocks	\$	39,485	\$	(1,310)	\$	38,175	\$	6,757	\$	(528)	\$	6,229	
											-		

Based upon the Company's current evaluation of these securities in accordance with its impairment policy, the Company has concluded that these securities are not other—than-temporarily impaired. Additionally, the Company currently intends and has the ability to hold the securities with unrealized losses for a period of time sufficient for them to recover.

Scheduled Maturities of Bonds: The carrying value and estimated fair value of bonds, categorized by contractual maturity, are shown below. Bonds not due at a single maturity date have been included in the following table based on the year of final maturity. Actual maturities may differ from contractual maturities because borrowers may prepay obligations with or without call or prepayment penalties. Mortgage-backed, asset-backed, and bond exchange traded fund securities are shown separately in the table below, as they are not due at a single maturity date (in millions):

	Decembe	r 31, 20′	December 31, 2016				
	k/ Adjusted ying Value		nated Fair Value		/ Adjusted ving Value	Esti	mated Fair Value
Due in one year or less	\$ 2,929	\$	2,985	\$	2,741	\$	2,788
Due after one year through five years	24,316		25,260		21,217		22,309
Due after five years through ten years	39,020		40,492		42,787		43,657
Due after ten years	58,479		65,571		54,802		58,970
Subtotal	 124,744		134,308		121,547		127,724
Residential mortgage-backed securities	31,760		33,980		35,063		37,514
Commercial mortgage-backed securities	10,358		10,503		10,685		10,857
Asset-backed securities	17,994		19,118		17,324		18,258
Exchange-traded funds	 39		39		597		588
Subtotal	 60,151		63,640		63,669		67,217
Total	\$ 184,895	\$	197,948	\$	185,216	\$	194,941

Bond Diversification: The following table presents the diversification of the carrying values of long-term bond investments at December 31. Loan-backed and structured securities issued by the U.S. government are included in residential mortgage-backed securities and asset-backed securities.

	2017	2016
Residential mortgage-backed securities	17.2%	18.9%
Manufacturing	11.5	11.4
Public utilities	10.2	9.8
Asset-backed securities	9.7	9.4
U.S. governments	8.1	8.6
Other	7.9	7.5
Services	7.3	6.6
Finance and financial services	6.9	6.6
Revenue and special obligations	5.8	4.8
Commercial mortgage-backed securities	5.6	5.8
Oil and gas	4.4	5.0
Communications	2.7	3.0
All other governments	2.7	2.6
Total	100.0%	100.0%

The following table presents the carrying value of the long-term bond portfolio by investment grade as of December 31, (dollars in millions):

		20	16		
NAIC 1 and 2	\$	167,373	90.5%	\$ 168,741	91.1%
NAIC 3 through 6		17,522	9.5	16,475	8.9
Total	\$	184,895	100.0%	\$ 185,216	100.0%

Sub-prime exposure: The following table presents the carrying value of the sub-prime residential mortgage-backed securities by investment grade as of December 31, (dollars in millions):

	2017							
NAIC 1 and 2	\$	1,431	98.7%	\$	1,918	98.3%		
NAIC 3 through 6		19	1.3%		34	1.7%		
Total	\$	1,450	100.0%	\$	1,952	100.0%		

Loan-backed and Structured Securities: The near-term prepayment assumptions for loan-backed and structured securities are based on historical averages drawing from performance experience for a particular transaction and may vary by security type. The long-term assumptions are adjusted based on expected performance.

For the years ended December 31, 2017 and 2016, the Company recognized OTTI on loan-backed and structured securities of \$8 million and \$21 million, respectively.

Other Disclosures: The following table represents the carrying amount of bonds and stocks denominated in a foreign currency as of December 31, (in millions):

	:	2017	 2016
Carrying amount of bonds and stocks denominated in foreign currency	\$	3,160	\$ 2,542
Carrying amount of bonds and stocks denominated in foreign currency which are collateralized by real estate	\$	830	\$ 793

Note 4 - Mortgage Loans

The Company originates mortgage loans that are principally collateralized by commercial real estate. The composition of the mortgage loan portfolio as of December 31, is as follows (in millions):

Loan Type	2017	2016
Commercial loans	\$ 22,806	\$ 18,003
Mezzanine loans	2,563	1,741
Residential loans	1,228	1,357
Total	\$ 26,597	\$ 21,101

The maximum and minimum lending rates for mortgage loans originated or purchased during 2017 and 2016 are as follows:

	2017	7	2016			
Loan Type	Maximum	Minimum	Maximum	Minimum		
Commercial loans	6.11%	2.90%	6.00%	3.03%		
Mezzanine loans	9.16%	4.69%	6.26%	5.85%		
Residential loans	4.15%	3.55%	4.63%	3.10%		

The maximum percentage of any one loan to the value ("LTV") of the property at the time of the loan, exclusive of insured, guaranteed or purchase money mortgages, originated or purchased during 2017 and 2016 are as follows:

	Maximum L	Maximum LTV								
Loan Type	2017	2016								
Commercial loans	79.9%	69.7%								
Mezzanine loans	75.5%	76.2%								
Residential loans	74.9%	80.0%								

Impairment Review Process: The Company monitors the effects of current and expected market conditions and other factors on the collectability of mortgage loans to identify and quantify any impairment in value. Impairments are classified as either temporary, for which a recovery is anticipated, or other-than-temporary. Mortgage loans held to maturity with other-than-temporarily impaired values at December 31, 2017 and 2016 have been written down to net realizable values based upon independent appraisals of the collateral. For impaired mortgage loans where the impairments are deemed to be temporary, an allowance for credit losses is established.

Credit Quality

For commercial mortgage loans, the primary credit quality indicators are the loan-to-value ratio, debt service coverage ratio and delinquency. Loan-to-value-ratios compare the unpaid principal balance of the loan to the estimated fair value of the underlying collateral. Generally, the higher the loan-to-value ratio, the higher the risk of experiencing a credit loss. Debt service coverage compares a property's net operating income to amounts needed to service the principal and interest due under the loan. Generally, the lower the debt service coverage ratio, the higher the risk of experiencing a credit loss. The debt service coverage ratio and the loan-to-value ratio, as well as the values utilized in calculating these ratios, are updated quarterly, with a portion of the loan portfolio updated annually. Delinquency is defined as a mortgage loan which is past due. Commercial mortgage loans more than 30 days past due are considered delinquent.

For residential mortgage loans, the Company's primary credit quality indicator is performance versus non-performance. The Company generally defines nonperforming residential mortgage loans as those that are 90 or more days past due and/or on non-accrual status. Generally, nonperforming residential loans have a higher risk of experiencing a credit loss.

The credit quality of commercial mortgage loans at December 31, are as follows (dollars in millions):

	Recorded Investment - Commercial												
		Loan-to-value Ratios											
2017		> 70%		< 70%		Total	% of Total						
Debt service coverage ratios:													
Greater than 1.20x	\$	2,175	\$	21,547	\$	23,722	93.1%						
Less than 1.20x		483		1,161		1,644	6.5%						
Construction		92		_		92	0.4%						
Total	\$	2,750	\$	22,708	\$	25,458	100.0%						
		Recorded Investment - Commercial											
				Loan-to-va	alue Ra	atios							
2016		> 70%		< 70%		Total	% of Total						
Debt service coverage ratios:													
Greater than 1.20x	\$	2,284	\$	15,795	\$	18,079	91.3%						
Less than 1.20x		699		961		1,660	8.4%						
Construction		67		_		67	0.3%						
Total	\$	3,050	\$	16,756	\$	19,806	100.0%						

Mortgage Loan Age Analysis: The following table sets forth an age analysis of mortgage loans and identification of mortgage loans in which the Company is a participant or co-lender in a mortgage loan agreement as of December 31, (dollars in millions):

				Resi	Residential Commercial									
2017	Farm		Insured		All Other		Insured		All Other		- Mezzanine			Total
Recorded investment														
Current	\$	_	\$	_	\$	1,227	\$	_	\$	22,884	\$	2,574	\$	26,685
30-59 days past due	\$	_	\$	_	\$	4	\$	_	\$	_	\$	_	\$	4
60-89 days past due	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_
90-179 days past due	\$	_	\$	_	\$	1	\$	_	\$	_	\$	_	\$	1
Participant or co-lender in a mortgage loan agreement														
Recorded investment	\$	_	\$	_	\$	_	\$	_	\$	4,235	\$	2,516	\$	6,751

	Residential 2016 Farm Insured All Other		al	Commercial									
2016			Insured		All Other		Insured		All Other		Mezzanine		Total
Recorded investment													
Current	\$	_	\$	_	\$	1,359	\$	_	\$	18,058	\$	1,748	\$ 21,165
30-59 days past due	\$	_	\$	_	\$	1	\$	_	\$	_	\$	_	\$ 1
60-89 days past due	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_	\$ _
90-179 days past due	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_	\$ _
Participant or co-lender in a mortgage loan agreement													
Recorded investment	\$	_	\$	_	\$	_	\$	_	\$	3,858	\$	1,704	\$ 5,562

Mortgage Loan Diversification: The following tables set forth the mortgage loan portfolio by property type and geographic distribution as of December 31,

	2017	2016
Mortgage Loans by Property Type (Commercial & Residential):	% of Total	% of Total
Office buildings	32.4%	32.3%
Shopping centers	28.9	28.1
Apartments	15.6	13.8
Industrial buildings	13.1	13.6
Other - commercial	5.4	5.8
Residential	4.6	6.4
Total	100.0%	100.0%

	20	17	2016 % of Total		
	% of '	Total			
Mortgage Loans by Geographic Distribution:	Commercial	Residential	Commercial	Residential	
South Atlantic	25.1%	16.0%	26.5%	16.1%	
Pacific	17.4	44.4	17.0	44.3	
South Central	14.6	6.8	16.8	6.9	
Middle Atlantic	15.8	14.4	16.3	14.1	
North Central	8.8	3.2	11.2	3.1	
New England	8.4	5.5	6.7	5.7	
Other	9.9	9.7	5.5	9.8	
Total	100.0%	100.0%	100.0%	100.0%	

Regional classification is based on American Council of Life Insurers regional chart. See below for details of regions.

South Atlantic states are DE, DC, FL, GA, MD, NC, SC, VA and WV

South Central states are AL, AR, KY, LA, MS, OK, TN and TX

Middle Atlantic states are PA, NJ and NY

Pacific states are AK, CA, HI, OR and WA

North Central states are IA, IL, IN, KS, MI, MN, MO, NE, ND, OH, SD and WI

New England states are CT, MA, ME, NH, RI and VT

Other comprises investments in Mountain states (AZ, CO, ID, MT, NV, NM, UT, and WY), Australia, Canada and United Kingdom.

Scheduled Mortgage Loan Maturities: At December 31, contractual maturities for mortgage loans are as follows (in millions):

	2017			2016		
	Carry	ing Value	Carrying Value			
Due in one year or less	\$	571	\$	412		
Due after one year through five years		5,666		3,177		
Due after five years through ten years		14,749		12,425		
Due after ten years		5,611		5,087		
Total	\$	26,597	\$	21,101		

Actual maturities may differ from contractual maturities because borrowers may have the right to prepay mortgages, although prepayment premiums may be applicable.

With respect to impaired loans, the Company accrues interest income to the extent it is deemed collectible. Cash received on impaired mortgage loans that are performing according to their contractual terms is applied in accordance with those terms. For mortgage loans in the process of foreclosure, cash received is initially held in suspense and

applied as a return of principal at the time that the foreclosure process is completed, or the mortgage is otherwise disposed. There are no mortgage loans with interest more than 180 days past due at December 31, 2017 or 2016.

Mortgage loans of \$43 million at December 31, 2016, represent the carrying value of amounts due from related parties that are collateralized by real estate owned by the Company's investment subsidiaries and affiliates. There were no mortgage loans due from related parties as of December 31, 2017.

Note 5 - Real Estate

At December 31, 2017 and 2016, the Company's directly owned real estate investments, were carried net of third party mortgage encumbrances. There were \$5 million of third party mortgage encumbrances as of December 31, 2017, and none for December 31, 2016.

The directly owned real estate portfolio is diversified by property type and geographic region based on carrying value at December 31, as follows:

	2017	2016
Directly Owned Real Estate by Property Type:	% of Total	% of Total
Industrial buildings	39.2%	38.3%
Office buildings	28.5	27.2
Apartments	19.7	18.8
Retail	7.1	6.8
Mixed-use projects	4.2	7.7
Land under development	1.3	1.2
Total	100.0%	100.0%

	2017	2016
Directly Owned Real Estate by Geographic Region:	% of Total	% of Total
Pacific	63.0%	60.9%
South Atlantic	25.7	24.5
Middle Atlantic	8.4	7.9
South Central	2.1	2.1
North Central	0.8	4.6
Total	100.0%	100.0%

The Company monitors the effects of current and expected market conditions and other factors on its real estate investments to identify and quantify any impairment in value. The Company assesses assets to determine if events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. The Company evaluates the recoverability of income producing investments based on undiscounted cash flows and then reviews the results of an independent third party appraisal to determine the fair value and if an adjustment is warranted.

Note 6 - Subsidiary, controlled and affiliated entities

The Company holds interests in subsidiary, controlled and affiliated (SCA) entities which are reported as common stock or other long-term investments. The carrying value of investments in SCA entities at December 31, are shown below (in millions):

	2017	2016	
Net carrying value of the SCA entities			
Reported as common stock	\$ 4,665	\$	2,080
Reported as other long-term investments	22,777		20,666
Total net carrying value	\$ 27,442	\$	22,746

On June 9, 2017, the Company acquired EverBank Financial Corp ("EFC"), inclusive of its wholly-owned subsidiary EverBank, for \$2,648 million. EverBank and TIAA-CREF Trust Company, FSB were subsequently combined under the legal name TIAA, FSB (the "Bank") and will be held by the Company's wholly-owned holding company TIAA FSB Holdings, Inc ("Holdings").

Other than as disclosed above, for the years ended December 31, 2017, 2016 and 2015, the Company did not have any related party transactions which exceeded one-half of 1% of the Company's admitted assets.

As of December 31, 2017 and 2016, no investment in a SCA entity exceeded 10% of the Company's admitted assets, and the Company does not have any investment in foreign insurance subsidiaries.

The following tables provide information on the Company's significant investments in non-insurance SCA entities reported as common stock, as well as information received from the NAIC in response to the filing of the common stock investments as of December 31, 2017 (in millions):

				2017				
SCA Entities	Percentage o Ownershi		oss Amount	Admitted An	nount	Nonadmitted Amount		
TIAA FSB Holdings, Inc.	100%	100%		\$3,331 \$3,331		\$3,331		\$—
			2	2017				
SCA Entity	Type of NAIC Filing	Date of Filing to the NAIC	NAIC Valuation Amount	NAIC Response Received Y/N	Va	Disallowed Entities Iluation Method, nission Required Y/N		
TIAA FSB Holdings, Inc.	Sub-1	8/24/2017	N/A	Y		N/A		

The Company held bonds of affiliates at December 31, 2017 and 2016 of \$848 million and \$929 million, respectively.

As of December 31, 2017 and 2016, the net amount due to SCA entities was \$442 million and \$255 million, respectively. The net amounts are generally settled on a daily basis with the exception of several investment and operating SCA entities which settle on a monthly basis. During 2017, the Company created a subsidiary deposit program which allows certain subsidiaries the ability to deposit excess cash with the Company and earn daily interest. The deposits from this program are included in the net amount due to SCA entities and were \$469 million as of December 31, 2017.

There are no guarantees or undertakings, written or otherwise, for the benefit of an affiliate or a related party that resulted in a material contingent exposure of the reporting entity's or any related party's assets or liabilities.

The Company holds investments in downstream non-insurance holding companies, which are valued by the Company utilizing the look-through approach as defined in SSAP 97, *Investments in Subsidiary, Controlled and Affiliated Entities*. The financial statements for the downstream non-insurance holding companies are not audited and the Company has limited the value of its investment in these non-insurance holding companies to the value contained in the audited financial statements of the underlying investments and unamortized goodwill resulting from the statutory purchase method of accounting. All liabilities, commitments, contingencies, guarantees or obligations of these subsidiaries,

which are required to be recorded as liabilities, commitments, contingencies, guarantees or obligations under applicable accounting guidance, are reflected in the Company's determination of the carrying value of the investment in these subsidiaries, if not already recorded in the subsidiaries' financial statements.

The Company's carrying value in downstream non-insurance holding companies is \$6,589 million and \$10,115 million as of December 31, 2017 and 2016, respectively. Significant holdings as of December 31, are as follows (in millions):

	2	2016			
Subsidiary	Carryi	Carrying Value			
TIAA Global Ag Holdco LLC	\$	979	\$	916	
TIAA Super Regional Mall Member Sub LLC		824		782	
TIAA Infrastructure Investments, LLC		658		289	
Occator Agricultural Properties, LLC		493		441	
TIAA Oil and Gas Investments, LLC		448		645	
T-C Europe, LP		445		369	
T-C Lux Fund Holdings LLC		358		189	
TIAA-Stonepeak Investments I, LLC		312		268	
T-C HV Member LLC		252		258	
730 Power Development, LLC		251		102	
Infra Alpha LLC		198		312	
T-C Waterford Blue Lagoon LLC		197		202	
T-C MV Member LLC		175		_	
TIAA GTR Holdco LLC		142		75	
Other		857		635	
Nuveen, LLC *		_		4,632	
Total	\$	6,589	\$	10,115	

^{*} Nuveen, LLC ("Nuveen") was formerly known as TIAA Global Asset Management, LLC. The 2017 financial statements will be audited at the holding company level, and therefore is no longer valued by the Company utilizing the look through approach defined in SSAP97.

Note 7 - Other Long-Term Investments

The components of the Company's carrying value in other long term investments are (in millions):

		2016		
Affiliated other invested assets	\$	22,777	\$	20,666
Unaffiliated other invested assets		7,007		6,780
Other long-term assets		381		66
Total other long-term investments	\$	30,165	\$	27,512

As of December 31, 2017 and 2016, affiliated other invested assets consist primarily of investments through downstream legal entities in the following (in millions):

	2017		2016
Real Estate	\$	5,897	\$ 5,258
Operating subsidiaries and affiliates		5,213	4,762
Securities		5,053	4,367
Agriculture and timber		4,399	4,458
Energy and infrastructure		2,215	1,821
Total affiliated other invested assets	\$	22,777	\$ 20,666

Of the \$5,213 million and \$4,762 million of operating subsidiaries and affiliates as of December 31, 2017 and 2016, \$5,064 million and \$4,632 million were attributed to Nuveen, respectively.

As of December 31, 2017 and 2016, unaffiliated other invested assets consist primarily of investments in joint ventures, partnerships and LLCs with interests in venture capital, leveraged buy-out funds and other equity investments.

The following table presents the OTTI recorded for the years ended December 31, (in millions) for other long-term investments for which the carrying value is not expected to be recovered:

OTTI 2017 2016 2015 S 454 \$ 384 \$ 296

The following table presents the carrying value for other long-term investments denominated in foreign currency for the years ended December 31, (in millions):

Other long-term investments denominated in foreign currency \$ 1,678 \$ 1,765

Note 8 - Investments Commitments

The outstanding obligation for future investments at December 31, 2017, is shown below by asset category (in millions):

	2018		In later years		al Commitments
Bonds	\$	429	\$ 82	\$	511
Stocks		96	60		156
Mortgage loans		413	_		413
Other long-term investments		2,067	3,576		5,643
Total	\$	3,005	\$ 3,718	\$	6,723

The funding of bond commitments is contingent upon the continued favorable financial performance of the potential borrowers, funding of stock commitments is contingent upon their continued favorable financial performance and the funding of commercial mortgage commitments is generally contingent upon the underlying properties meeting specified requirements, including construction, leasing and occupancy. The funding of residential mortgage loan commitments is contingent upon the loan meeting specified guidelines including property appraisal reviews and confirmation of borrower credit. For other long—term investments, primarily fund investments, there are scheduled capital calls that extend into future years.

Note 9 - Investment Income and Capital Gains and Losses

Net Investment Income: The components of net investment income for the years ended December 31, are as follows (in millions):

	2017		2016		2015
Bonds	\$	8,709	\$	8,879	\$ 8,823
Stocks		43		146	76
Mortgage loans		1,055		937	846
Real estate		237		222	236
Derivatives		109		57	17
Other long-term investments		2,242		2,239	1,753
Cash, cash equivalents and short-term investments		9		6	 3
Total gross investment income		12,404		12,486	11,754
Less investment expenses		(723)		(725)	(685)
Net investment income before amortization of IMR		11,681		11,761	11,069
Plus amortization of IMR		194		146	266
Net investment income	\$	11,875	\$	11,907	\$ 11,335

Realized Capital Gains and Losses: The net realized capital gains (losses) on sales, redemptions and write-downs due to OTTI for the years ended December 31, are as follows (in millions):

	 2017	2016	 2015
Bonds	\$ 632	\$ (204)	\$ (380)
Stocks	(116)	16	(85)
Mortgage loans	(8)	(17)	14
Real estate	67	226	83
Derivatives	(131)	125	324
Other long-term investments	(470)	(358)	(320)
Cash, cash equivalents and short-term investments	51	 (23)	(36)
Total before capital gains taxes and transfers to IMR	 25	(235)	(400)
Transfers to IMR	(623)	74	(87)
Net realized capital losses less capital gains taxes, after transfers to IMR	\$ (598)	\$ (161)	\$ (487)

Write-downs of investments resulting from OTTI, included in the preceding table, are as follows for the years ended December 31, (in millions):

	2	017	2016	2015
Other-than-temporary impairments:				
Bonds	\$	66	\$ 90	\$ 274
Stocks		311	46	284
Mortgage Loans		_	2	_
Other long-term investments		454	384	296
Total	\$	831	\$ 522	\$ 854

Information related to the sales of long term bonds are as follows for the years ended December 31, (in millions):

	2017	2016	2015
Proceeds from sales	\$ 13,664	\$ 10,436	\$ 6,249
Gross gains on sales	\$ 745	\$ 243	\$ 120
Gross losses on sales	\$ 122	\$ 321	\$ 58

The Company performs periodic reviews of its portfolio to identify investments which may have deteriorated in credit quality to determine if any are candidates for sale in order to maintain a quality portfolio of investments. Investments which are deemed candidates for sale are continually monitored until sold and carried at the lower of amortized cost or fair value. In accordance with the Company's valuation and impairment process, the investment will be monitored quarterly for further declines in fair value at which point an OTTI will be recorded until actual disposal of the investment.

Note 10 - Disclosures about Fair Value of Financial Instruments

Fair Value of Financial Instruments

Included in the Company's financial statements are certain financial instruments carried at fair value. Other financial instruments are periodically measured at fair value, such as when impaired, or for certain bonds and preferred stocks when carried at the lower of cost or fair value.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Fair values of financial instruments are based on quoted market prices when available. When market prices are not available, fair values are primarily provided by a third party-pricing service for identical or comparable assets, or through the use of valuation methodologies using observable market inputs. These fair values are generally estimated using a discounted cash flow analysis, incorporating current market inputs for similar financial instruments with comparable terms and credit quality. In instances where there is little or no market activity for the same or similar instruments, the Company estimates fair value using methods, models and assumptions that management believes market participants would use to determine a current transaction price in a hypothetical market. These valuation techniques involve management estimation and judgment for many factors including market bid/ask spreads, and such estimations may become significant with increasingly complex instruments or pricing models.

The Company's financial assets and liabilities are classified, for disclosure purposes, based on a hierarchy defined by SSAP No. 100, Fair Value Measurements. The fair value hierarchy prioritizes the inputs to valuation techniques used to measure fair value into three broad levels. The hierarchy gives the highest ranking to fair values determined using unadjusted quoted prices in active markets for identical assets and liabilities (Level 1) and the lowest ranking to fair values determined using methodologies and models with unobservable inputs (Level 3). An asset's or a liability's classification is based on the lowest level input that is significant to its measurement. For example, a Level 3 fair value measurement may include inputs that are both observable (Levels 1 and Level 2) and unobservable (Level 3). The levels of the fair value hierarchy are as follows:

Level 1 – Inputs are unadjusted quoted prices in active markets for identical assets and liabilities that the Company has the ability to access at the measurement date.

Level 2 – Other than quoted prices within Level 1 inputs are observable for the asset or liability, either directly or indirectly.

Level 2 inputs include:

- Quoted prices for similar assets or liabilities in active markets,
- Quoted prices for identical or similar assets or liabilities in markets that are not active,
- Inputs other than guoted prices that are observable for the asset or liability.
- Inputs that are derived principally from or corroborated by observable market data by correlation or other means.

Level 3 – Inputs are unobservable inputs for the asset or liability supported by little or no market activity. Unobservable inputs reflect the Company's own assumptions about the assumptions that market participants would use in pricing the asset or liability. The Company's data used to develop unobservable inputs is adjusted if information is reasonably available without undue cost and effort that indicates that market participants would use different assumptions.

The following table provides information about the aggregate fair value for all financial instruments and the level within the fair value hierarchy at December 31, 2017 (in millions):

	ggregate air Value		dmitted Assets	Level 1	Level 2	Level 3
Assets:						
Bonds	\$ 197,948	\$	184,895	\$ 39	\$ 193,053	\$ 4,856
Common stock	1,015		1,015	812	_	203
Preferred stock	406		338	43	19	344
Mortgage loans	26,742		26,597	_	_	26,742
Derivatives	291		244	_	153	138
Contract loans	1,680		1,680	_	_	1,680
Separate account assets	37,599		37,596	12,716	4,845	20,038
Cash, cash equivalents & short term investments	641		640	280	361	_
Total	\$ 266,322	\$	253,005	\$ 13,890	\$ 198,431	\$ 54,001
	ggregate air Value	S	tatement Value	Level 1	Level 2	Level 3
Liabilities:						
Deposit-type contracts	\$ 1,062	\$	1,062	\$ _	\$ _	\$ 1,062
Separate account liabilities	37,565		37,565	_	_	37,565
Derivatives	482		470	_	482	_
Total	\$ 39,109	\$	39,097	\$ 	\$ 482	\$ 38,627

The following table provides information about the aggregate fair value for all financial instruments and the level within the fair value hierarchy at December 31, 2016 (in millions):

	ggregate air Value		Admitted Assets	Level 1	Level 2	Level 3
Assets:						
Bonds	\$ 194,941	\$	185,216	\$ 588	\$ 190,710	\$ 3,643
Common stock	1,311		1,311	788	_	523
Preferred stock	217		170	31	18	168
Mortgage loans	21,320		21,101	_	_	21,320
Derivatives	552		526	_	516	36
Contract loans	1,587		1,587	_	_	1,587
Separate account assets	33,756		33,757	9,623	4,665	19,468
Cash, cash equivalents & short term investments	605		605	432	35	138
Total	\$ 254,289	\$	244,273	\$ 11,462	\$ 195,944	\$ 46,883
	ggregate air Value	S	Statement Value	Level 1	Level 2	Level 3
Liabilities:						
Deposit-type contracts	\$ 1,010	\$	1,010	\$ _	\$ _	\$ 1,010
Separate account liabilities	33,737		33,737	_	_	33,737
Derivatives	77		62	_	77	_
Total	\$ 34,824	\$	34,809	\$ _	\$ 77	\$ 34,747

The estimated fair values of the financial instruments presented above are determined by the Company using market information available as of December 31, 2017 and 2016. Considerable judgment is required to interpret market data in developing the estimates of fair value for financial instruments for which there are no available market value

quotations. The estimates presented are not necessarily indicative of the amounts the Company could realize in a market exchange. The use of different market assumptions and/or estimation methodologies may have a material effect on the estimated fair value amounts.

Level 1 financial instruments

Unadjusted quoted prices for these securities are provided to the Company by independent pricing services. Common stock, preferred stock, and separate account assets in Level 1 primarily include mutual fund investments valued by the respective mutual fund companies, exchange listed equities, and public real estate investment trusts. Bonds included in level 1 represent SVO-identified exchange traded funds that qualify for bond treatment, which are valued using quoted market prices. Cash, cash equivalents and short term investments include currency denominated in US Dollars.

Level 2 financial instruments

Bonds included in Level 2 are valued principally by third party pricing services using market observable inputs. Because most bonds do not trade daily, independent pricing services regularly derive fair values using recent trades of securities with similar features. When recent trades are not available, pricing models are used to estimate the fair values of securities by discounting future cash flows at estimated market interest rates. Typical inputs to models used by independent pricing services include but are not limited to benchmark yields, reported trades, broker-dealer quotes, issuer spreads, benchmark securities, bids, offers, reference data, and industry and economic events. Additionally, for loan-backed and structured securities, valuation is based primarily on market inputs including benchmark yields, expected prepayment speeds, loss severity, delinquency rates, weighted average coupon, weighted average maturity and issuance specific information. Issuance specific information includes collateral type, payment terms of underlying assets, payment priority within the tranche, structure of the security, deal performance and vintage of loans.

Preferred stocks included in Level 2 include those which are traded in an inactive market for which prices for identical securities are not available. Valuations are based principally on observable inputs including quoted prices in markets that are not considered active.

Derivative assets and liabilities classified in Level 2 represent over-the-counter instruments that include, but are not limited to, fair value hedges using foreign currency swaps, foreign currency forwards, commodity forwards, interest rate swaps and credit default swaps. Fair values for these instruments are determined internally using market observable inputs that include, but are not limited to, forward currency rates, interest rates, credit default rates and published observable market indices.

Separate account assets in Level 2 consist principally of short term government agency notes and commercial paper.

Level 3 financial instruments

Valuation techniques for bonds included in Level 3 are generally the same as those described in Level 2 except that the techniques utilize inputs that are not readily observable in the market, including illiquidity premiums and spread adjustments to reflect industry trends or specific credit-related issues. The Company assesses the significance of unobservable inputs for each security and classifies that security in Level 3 as a result of the significance of unobservable inputs.

Estimated fair value for privately traded equity securities are principally determined using valuation and discounted cash flow models that require a substantial level of judgment.

Mortgage loans are valued using discounted cash flow models that utilize inputs which include loan and market interest rates, credit spreads, the nature and quality of underlying collateral and the remaining term of the loans.

Contract loans are fully collateralized by the cash surrender value of underlying insurance policies and are valued based on the carrying value of the loan, which approximates fair value, and are classified as Level 3.

Separate account assets classified as Level 3 primarily include directly owned real estate properties, real estate joint ventures and real estate limited partnerships. Directly owned real estate properties are valued on a quarterly basis based on independent third party appraisals. Real estate joint venture interests are valued based on the fair value of the underlying real estate, any related mortgage loans payable and other factors such as ownership percentage, ownership rights, buy/sell agreements, distribution provisions and capital call obligations. Real estate limited partnership interests are valued based on the most recent net asset value of the partnership.

Separate account liabilities are accounted for at fair value, except the TIAA Stable Value Separate Account, which supports book value separate account agreements, in which case the assets are accounted for at amortized cost. Separate account liabilities reflect the contractual obligations of the insurer arising out of the provisions of the insurance contract.

Deposit-type contracts are valued based on the accumulated account value, which approximates fair value, and are classified as Level 3.

Assets and Liabilities Measured and Reported at Fair Value

The following table provides information about the Company's financial assets and liabilities measured and reported at fair value as of December 31, (in millions):

		20	17		
	Level 1	Level 2		Level 3	Total
Assets at fair value:					
Bonds					
U.S. Government	\$ _	\$ 872	\$	_	\$ 872
Industrial and miscellaneous	39	79		65	183
Total bonds	\$ 39	\$ 951	\$	65	\$ 1,055
Common stock					
Industrial and miscellaneous	\$ 812	\$ _	\$	203	\$ 1,015
Total common stocks	\$ 812	\$ _	\$	203	\$ 1,015
Derivatives					
Interest rate contracts	\$ _	\$ 3	\$	_	\$ 3
Foreign exchange contracts		125		_	125
Total derivatives	\$ 	\$ 128	\$		\$ 128
Separate accounts assets	\$ 12,706	\$ 3,887	\$	20,038	\$ 36,631
Total assets at fair value	\$ 13,557	\$ 4,966	\$	20,306	\$ 38,829
Liabilities at fair value:				_	
Derivatives					
Foreign exchange contracts	\$ _	\$ 414	\$	_	\$ 414
Commodity forwards	_	18		_	18
Credit default swaps	_	14		_	14
Total liabilities at fair value	\$ _	\$ 446	\$	_	\$ 446

			20	16		
	L	_evel 1	Level 2		Level 3	Total
Assets at fair value:			 			
Bonds						
Industrial and miscellaneous	\$	_	\$ 130	\$	28	\$ 158
Total bonds	\$	_	\$ 130	\$	28	\$ 158
Common stock						
Industrial and miscellaneous	\$	788	\$ 	\$	523	\$ 1,311
Total common stocks	\$	788	\$ 	\$	523	\$ 1,311
Derivatives						
Interest rate contracts	\$	_	\$ 4	\$	_	\$ 4
Foreign exchange contracts			453			453
Total derivatives	\$		\$ 457	\$		\$ 457
Separate accounts assets	\$	9,601	\$ 4,054	\$	19,468	\$ 33,123
Total assets at fair value	\$	10,389	\$ 4,641	\$	20,019	\$ 35,049
Liabilities at fair value:						
Derivatives						
Foreign exchange contracts	\$	_	\$ 37	\$	_	\$ 37
Credit default swaps			11			11
Total liabilities at fair value	\$		\$ 48	\$		\$ 48

Transfers between Level 1 and Level 2

Periodically, the Company has transfers between Level 1 and Level 2 due to the availability of quoted prices for identical assets in active markets at the measurement date. The Company's policy is to recognize transfers between levels as of the actual date of the event or change in circumstances that caused the transfer.

As of December 31, 2017 and 2016 the Company had no transfers between Level 1 and Level 2 of the fair value hierarchy.

Reconciliation of Level 3 assets and liabilities measured and reported at fair value:

The following is a reconciliation of the beginning and ending balances for assets and liabilities measured and reported at fair value using Level 3 inputs at December 31, 2017 (in millions):

	Ba	ginning lance at /01/2017	insfers into evel 3		Transfers out of Level 3	in	otal gains (losses) Icluded in et Income	otal gains (losses) ncluded in Surplus	Pı	urchases	ls	ssuances (Sales)	Se	ettlements	Ending Balance at 12/31/2017
Bonds	\$	28	\$ 68	а	\$ (35)	b \$	(6)	\$ 11	\$	_	\$	_	\$	(1)	65
Common stock		523	_		(22)	С	85	(54)		414		(739)		(4)	203
Separate account assets		19,468	_		_		(10)	327		1,087		(570)		(264)	20,038
Total	\$	20,019	\$ 68		\$ (57)	\$	69	\$ 284	\$	1,501	\$	(1,309)	\$	(269)	\$ 20,306

- (a) The Company transferred bonds into Level 3 that were measured and reported at fair value.
- (b) The Company transferred bonds out of Level 3 that were not measured and reported at fair value.
- (c) The Company transferred common stocks out of Level 3 due to the availability of observable market data used in the valuation of these securities.

The following is a reconciliation of the beginning and ending balances for assets and liabilities measured and reported at fair value using Level 3 inputs at December 31, 2016 (in millions):

	Ba	eginning lance at /01/2016	ransfers into _evel 3		Transfers out of Level 3	Total gains (losses) included in Net Income		Total gains (losses) included in Surplus	P	Purchases	ls	ssuances (Sales)	Se	ettlements	Bala	nding ance at 1/2016
Bonds	\$	33	\$ 29	a \$	(36) c	\$ —	. ;	\$ 4	\$	<u> </u>	\$	_	\$	(2)	\$	28
Common stock		502	4	b	_	(2)	18		135		(123)		(11)		523
Preferred stock		9	_		(10) d	_		1		_		_		_		_
Separate account assets		17,321	_			(2	()	572		1,708		(217)		86		19,468
Total	\$	17,865	\$ 33	\$	(46)	\$ (4) ;	\$ 595	\$	1,843	\$	(340)	\$	73	\$	20,019

- (a) The Company transferred bonds into Level 3 that were measured and reported at fair value.
- (b) The Company transferred common stocks into Level 3 due to the lack of observable market data used in the valuation of these securities.
- (c) The Company transferred bonds out of Level 3 that were not measured and reported at fair value.
- (d) The Company transferred preferred stocks out of Level 3 that were no longer measured and reported at fair value.

The Company's policy is to recognize transfers into and out of Level 3 at the actual date of the event or change in circumstances that caused the transfer.

Quantitative Information Regarding Level 3 Fair Value Measurements

The following table provides quantitative information on significant unobservable inputs (Level 3) used in the fair value measurement of assets that are measured and reported at fair value at December 31, 2017 (dollars in millions):

Financial Instrument	air alue	Valuation Techniques	Significant Unobservable Inputs	Range of Inputs	Weighted Average
Fixed maturity securities:					
RMBS	\$ 5	Discounted cash Flow	Discount rate	5.5% - 8.5%	7.4%
		Market comparable	Credit analysis/market comparable	\$92.50	\$92.50
CMBS	\$ 1	Market comparable	Credit analysis/market comparable	\$27.23	\$27.23
ABS	\$ 34	Discounted cash Flow	Discount rate	8.7%	8.7 %
		Market Comparable	Discount rate	1.7%	1.7 %
Corporate and other bonds	\$ 25	Discounted cash flow	Discount rate	14.2%	14.2%
		Market comparable	Credit analysis/market comparable	\$7.15	\$7.15
Equity securities:					
Common stock ¹	\$ 203	Market comparable	EBITDA multiple	9.0x - 14.0x	12.1x
		Equity method	Book value multiple	1.0x	1.0x
		Market comparable	Credit analysis/market comparable	\$1.00 - \$1000.00	\$508.31

¹ Included in Level 3 Common Stock is the Company's holdings in FHLB of NY's stock as described in Note 20 - FHLBNY Membership and Borrowings. As prescribed in the FHLB of NY's capital plan, the par value of the capital stock is \$100 and all capital stock is issued, redeemed, repurchased, or transferred at par value. Since there is not an observable market for the FHLB of NY stock, these securities have been classified as Level 3.

Financial Instrument	Fa	air Value	Valuation Techniques	Significant Unobservable Inputs	Range of Inputs	Weighted Average
Separate account assets:	\$	21,977	·	·	•	J
Real estate properties and real estate joint ventures						
Office properties			Income approach - discounted cash flow	Discount rate	5.5%-8.0%	6.5%
				Terminal capitalization rate	4.5%-7.0%	5.5%
			Income approach - direct capitalization	Overall capitalization rate	3.8%-7.0%	4.8%
Industrial properties			Income approach - discounted cash flow	Discount rate	5.5%-8.9%	6.8%
				Terminal capitalization rate	4.5%-8.3%	5.5%
			Income approach - direct capitalization	Overall capitalization rate	4.0%–7.5%	5.0%
Residential properties			Income approach - discounted cash flow	Discount rate	5.0%-8.0%	6.1%
				Terminal capitalization rate	3.5%-6.5%	4.8%
			Income approach - direct capitalization	Overall capitalization rate	3.3%-6.0%	4.3%
Retail properties			Income approach - discounted cash flow	Discount rate	5.0%-10.5%	6.4%
				Terminal capitalization rate	4.3%-8.8%	5.2%
			Income approach - direct capitalization	Overall capitalization rate	3.8%-8.8%	4.7%

Separate account real estate assets include the values of the related mortgage loans payable in the table below.

Financial Instrument	Fa	ir Value	Valuation Techniques	Significant Unobservable Inputs	Range of Inputs	Weighted Average
Mortgage loans payable	\$	(2,238)				
Office and industrial properties			Discounted cash flow	Loan to value ratio	37.7%–69.5%	45.6%
				Equivalency rate	3.7%-5.2%	3.9%
			Net present value	Loan to value ratio	37.7%-69.5%	45.6%
				Weighted average cost of capital risk premium multiple	1.2–1.5	1.3
Residential properties			Discounted cash flow	Loan to value ratio	28.1%-64.2%	38.6%
				Equivalency rate	3.3%-3.6%	3.4%
			Net present value	Loan to value ratio	28.1%–64.2%	38.6%
				Weighted average cost of capital risk premium multiple	1.1–1.5	1.3
Retail properties			Discounted cash flow	Loan to value ratio	17.9%–56.0%	32.7%
				Equivalency rate	3.1%-4.4%	3.8%
			Net present value	Loan to value ratio	17.9%–56.0%	32.7%
				Weighted average cost of capital risk premium multiple	1.1–1.4	1.2

Separate account real estate assets include the values of the related loan receivable in the table below.

Financial Instrument	Fair Value		Valuation Techniques	Significant Unobservable Inputs	Range of Inputs	Weighted Average
Loan receivable	\$	299				
Office, retail and storage properties			Discounted cash flow	Loan to value ratio	59.4%-77.3%	75.1%
				Equivalency rate	4.2%-8.3%	6.2%

Additional Qualitative Information on Fair Valuation Process

The Company has various processes and controls in place to ensure that fair value is reasonably estimated. The procedures and framework for fair value methodologies are approved by the TIAA Valuation Committee. The Risk Management Valuation group is responsible for the determination of fair value in accordance with the procedures and framework approved by the TIAA Valuation Committee.

Risk Management Valuation (1) compares price changes between periods to current market conditions, (2) compares trade prices of securities to fair value estimates, (3) compares prices from multiple pricing sources, and (4) performs ongoing vendor due diligence to confirm that independent pricing services use market-based parameters for valuation. Internal and vendor valuation methodologies are reviewed on an ongoing basis and revised as necessary based on changing market conditions to ensure values represent a reasonable exit price.

Markets in which the Company's fixed income securities trade are monitored by surveying the Company's traders. Risk Management Valuation determines if liquidity is active enough to support a Level 2 classification. Use of independent non-binding broker quotations may indicate a lack of liquidity or the general lack of transparency in the process to develop these price estimates, causing them to be considered Level 3.

Level 3 equity investments generally include private equity co-investments along with general and limited partnership interests. Values are derived by the general partners. The partners generally fair value these instruments based on projected net earnings, earnings before interest, taxes depreciation and amortization, discounted cash flow, public or

private market transactions, or valuations of comparable companies. When using market comparable, certain adjustments may be made for differences between the reference comparable and the investment, such as liquidity. Investments may also be valued at cost for a period of time after an acquisition, as the best indication of fair value.

With respect to real property investments in TIAA's Real Estate Account, each property is appraised, and each mortgage loan is valued, at least once every calendar quarter. Each property is appraised by an independent, third party appraiser, reviewed by the Company's internal appraisal staff and as applicable, the Real Estate Account's independent fiduciary. Any differences in the conclusions of the Company's internal appraisal staff and the independent appraiser are reviewed by the independent fiduciary, who will make a final determination. The independent fiduciary was appointed by a special subcommittee of the Investment Committee of TIAA Board of Trustees to, among other things, oversee the appraisal process. The independent fiduciary must approve all independent appraisers used by the Real Estate Account.

Mortgage loans payable are valued internally by the Risk Management Valuation group, and reviewed by the Real Estate Account's independent fiduciary, at least quarterly based on market factors, such as market interest rates and spreads for comparable loans, the performance of the underlying collateral (such as the loan-to-value ratio and the cash flow of the underlying collateral), the liquidity for mortgage loans of similar characteristics, the maturity date of the loan, the return demands of the market.

The loans receivable are valued internally by the Risk Management Valuation group, and reviewed by the Real Estate Account's independent fiduciary, at least quarterly based on market factors, such as market interest rates and spreads for comparable loans, the liquidity for loans of similar characteristics, the performance of the underlying collateral (such as the loan-to-value ratio and the cash flow of the underlying collateral) and the credit quality of the counterparty. The Real Estate Account continues to use the revised value after valuation adjustments for the loan receivable to calculate the Account's daily net asset value until the next valuation review.

Note 11 - Restricted Assets

The following tables provide information on the amounts and nature of assets pledged to others as collateral or otherwise restricted by the Company as of December 31, (dollars in millions):

2017

											201	′						
		1	2		3		4		5		6		7	8		9	10	11
Restricted Asset Category	Ge Ac	Total eneral count G/A)	G/A upporting (S/A) Activity	R	Total Separate Account (S/A) estricted Assets	Sι	A Assets upporting A Activity	(1	Total	F P	otal rom rior 'ear	(D	ncrease / Decrease) minus 6)	Total Non admitted Restricted	F	Total Admitted Restricted 5 minus 8)	Gross (Admitted & Nonadmitted) Restricted to Total Assets	Admitted Restricted to Total Admitted Assets
Collateral held under security lending agreements	\$	706	\$ _	\$	26	\$	_	\$	732	\$	753	\$	(21)	\$ —	\$	5 732	0.24%	0.25%
FHLB capital stock		81	_		_		_		81		101		(20)	_		81	0.03%	0.03%
On deposit with states		18	_		_		_		18		18		_	_		18	0.01%	0.01%
Pledged as collateral not captured in other categories		332	_		_		_		332		79		253	_		332	0.11%	0.11%
Other restricted assets		_	_		42		_		42		46		(4)	_		42	0.01%	0.01%
Total restricted assets	\$	1,137	\$ _	\$	68	\$		\$	1,205	\$	997	\$	208	\$ —	\$	1,205	0.40%	0.41%

												2010	6						
		1		2		3		4		5		6		7	8		9	10	11
Restricted Asset Category	Ge Ac	Total eneral count G/A)		G/A Supporting (S/A) Activity		Total Separate Account (S/A) Restricted Assets	Su	S/A Assets Supporting Total G/A Activity (1 plus 3)			F	Total From Prior Year	rom Increase / rior (Decrease)		Total Non admitted Restricted	F	Total Admitted Restricted 5 minus 8)	Gross (Admitted & Nonadmitted) Restricted to Total Assets	Admitted Restricted to Total Admitted Assets
Collateral held under security lending agreements	\$	649	9 \$;	- :	\$ 104	\$	_	\$	753	\$	853	\$	(100) \$	\$ —	\$	753	0.26%	0.27%
FHLB capital stock		101		_	-	_		_		101		96		5	_		101	0.03%	0.04%
On deposit with states		18	3	_	-	_		_		18		6		12	_		18	0.01%	0.01%
Pledged as collateral not captured in other categories		79)	_	_	_		_		79		14		65	_		79	0.03%	0.03%
Other restricted assets	\$	_	- \$	S –	- :	\$ 46	\$	_	\$	46	\$	51	\$	(5)	\$ <u> </u>	\$	46	0.02%	0.02%
Total restricted assets	\$	847	7 \$;	- :	\$ 150	\$		\$	997	\$	1,020	\$	(23)	\$	\$	997	0.35%	0.37%

The pledged as collateral not captured in other categories represents derivative collateral the Company has pledged. The other restricted assets represents real estate deposits held within separate accounts.

The following tables provide the collateral received and reflected as assets by the Company and the recognized obligation to return collateral assets as of December 31, (dollars in millions):

					2017	
Collateral Assets	Carry	ok/Adjusted rrying Value (BACV)		r Value	BACV to Total G/A Assets (Admitted and Nonadmitted)	BACV to Total G/A Admitted Assets
Cash, cash equivalents and short-term investments	\$	34	\$	34	0.01%	0.01%
Securities lending collateral assets		706		706	0.27 %	0.27 %
Total collateral assets	\$	740	\$	740	0.28 %	0.28 %
					2017	
			-	Amoi	% of Liab Total C unt Liabilit	§/Å
Recognized obligation to return collateral assets			\$	}	740	0.33%
					2016	
Collateral Assets	Carr	(/Adjusted ying Value BACV)	Fai	r Value	BACV to Total G/A Assets (Admitted and Nonadmitted)	BACV to Total G/A Admitted Assets
Cash, cash equivalents and short-term investments	\$	479	\$	479	0.19%	0.19%
Securities lending collateral assets		649		649	0.25%	0.26%
Total collateral assets	\$	1,128	\$	1,128	0.44%	0.45%
					2016	
					% of I	_iability to

Recognized obligation to return collateral assets

Total G/A

Liabilities

0.53%

Amount

The Company receives primarily cash collateral for derivatives. The Company reinvests the cash collateral or uses the cash for general corporate purposes.

Note 12 - Derivative Financial Instruments

The Company uses derivative instruments for economic hedging, income generation, and asset replication purposes. The Company does not engage in derivative financial instrument transactions for speculative purposes. Derivative financial instruments used by the Company may be exchange-traded or contracted in the over-the-counter market ("OTC"). The Company's OTC derivative transactions are cleared and settled through central clearing counterparties ("OTC-cleared") or through bilateral contracts with other counterparties ("OTC-bilateral"). Should an OTC-bilateral counterparty fail to perform its obligations under contractual terms, the Company may be exposed to credit-related losses. The current credit exposure of the Company's derivatives is limited to the net positive fair value of derivatives at the reporting date, after taking into consideration the existence of netting agreements and any collateral received. All of the credit exposure for the Company from OTC-bilateral contracts is with investment grade counterparties. The Company also monitors its counterparty credit quality on an ongoing basis. The NAIC has also adopted disclosure requirements included within Accounting Standards Codification 815, "Derivatives and Hedging" ("ASC 815") and Accounting Standards Codification 460, "Guarantees" ("ASC 460"), for annual audited statements in accordance with guidelines provided by the Statutory Accounting Principles Working Group.

Collateral: The Company currently has International Swaps and Derivatives Association ("ISDA") master swap agreements in place with each derivative counterparty relating to over-the-counter transactions. In addition to the ISDA agreement, Credit Support Annexes ("CSA"), which are bilateral collateral agreements, are put in place with a majority of the Company's derivative OTC-bilateral counterparties. The CSAs allow the Company's mark-to-market exposure to a counterparty to be collateralized by the posting of cash or highly liquid U.S. government securities. The Company also exchanges cash and securities margin for derivatives traded through a central clearinghouse. As of December 31, 2017, counterparties pledged \$94 million of cash collateral and margin to the Company.

The Company must also post collateral or margin to the extent its net position with a given counterparty or clearinghouse is at a loss relative to the counterparty. As of December 31, 2017, the Company pledged the following collateral and margin to its counterparties, (in millions):

Cash collateral and margin \$ 285 Securities collateral and margin \$ 44

The amount of accounting loss the Company will incur if any party to the derivative contract fails completely to perform according to the terms of the contract and the collateral or other security, if any, for the amount due proved to be of no value to the Company is equal to the gross asset value of all derivative contracts which, as of December 31, 2017, is \$291 million.

Commodity Forward Contracts: The Company enters into crude oil forward contracts to hedge against the effect of fluctuations in crude oil prices on certain equity investments. This type of derivative instrument is traded OTC-bilateral and the Company is exposed to both market and counterparty risk. The changes in the carrying value of crude oil forward contracts are recognized as unrealized gains or losses. Derivative instruments used in economic hedging transactions that do not quality for hedge accounting treatment are accounted for at fair value.

Contingent Features: Certain of the Company's master swap agreements governing its derivative instruments contain provisions that require the Company to maintain a minimum credit rating from two of the major credit rating agencies. If the Company's credit rating falls below the specified minimum, each of the counterparties to agreements with such requirements could terminate all outstanding derivative transactions between such counterparty and the Company. The termination requires immediate payment of amounts expected to approximate the net liability positions of such transactions with such counterparty. The aggregate fair value of all derivative instruments with credit-risk-related contingent features in a liability position on December 31, 2017 is \$283 million for which the Company posted collateral of \$254 million in the normal course of business.

Foreign Currency Swap Contracts: The Company enters into foreign currency swap contracts to exchange fixed and variable amounts of foreign currency at specified future dates and at specified rates (in U.S. dollars) as a cash

flow hedge to manage currency risks on investments denominated in foreign currencies. This type of derivative instrument is traded OTC-bilateral, and the Company is exposed to both market and counterparty risk. The changes in the carrying value of foreign currency exchange rates are recognized as unrealized gains or losses. Derivative instruments used in hedging transactions that do not qualify for hedge accounting treatment are accounted for at fair value.

Foreign Currency Forward Contracts: The Company enters into foreign currency forward contracts to exchange foreign currency at specified future dates and at specified rates (in U.S. dollars) to manage currency risks on investments denominated in foreign currencies. This type of derivative instrument is traded OTC-bilateral, and the Company is exposed to both market and counterparty risk. The changes in the carrying value of foreign currency exchange rates are recognized as unrealized gains or losses. Derivative instruments used in hedging transactions that do not qualify for hedge accounting treatment are accounted for at fair value.

Interest Rate Swap Contracts: The Company enters into interest rate swap contracts to hedge against the effect of interest rate fluctuations on certain variable interest rate bonds. These contracts allow the Company to lock in a fixed interest rate and to transfer the risk of higher or lower interest rates. This type of derivative instrument may be traded OTC-cleared or OTC-bilateral, and the Company is exposed to both market and counterparty risk. Generally, no cash is exchanged at the outset of the contract and no principal payments are made by either party. These transactions are entered into pursuant to master agreements that provide for a single net payment to be made by one counterparty at each due date. Net payments received and net payments made or accrued under interest rate swap contracts are included in net investment income. Derivative instruments used in hedging transactions that do not qualify for hedge accounting treatment are accounted for at fair value.

Asset Swaps: The Company enters into an asset swap contract to exchange the cash flows of a fixed interest rate bond with a short duration for the cash flows of a fixed rate bond with a longer duration, or vice versa. The Company may also exchange the cash flows of a fixed interest rate bond for the cash flows of a variable rate bond, or vice versa. This type of derivative instrument is traded OTC-bilateral, and is exposed to both market and counterparty risk. These transactions may be held in hedging relationships or in an RSAT position. Asset swaps held in economic hedging relationships are carried and reported at fair value. Asset swaps used in accounting effective hedging relationships or replication transactions are carried at amortized cost with premiums recorded to investment income over the life of the contract.

Total Return Swaps: The Company enters into a total return swap contract to exchange a cash flow based on a fixed or variable rate in return for the total economic exposure of an underlying asset, which includes cash flows, credit risk and market risk, or vice versa. This type of derivative instrument is traded OTC-bilateral, and is exposed to both market and counterparty risk. These transactions may be held in hedging relationships or in an RSAT position. Total return swaps held in hedging relationships are carried and reported at fair value. Total return swaps used in replication transactions are carried at amortized cost with premiums recorded to investment income over the life of the contract.

Purchased Credit Default Swap Contracts: The Company uses credit default swaps to hedge against unexpected credit events on selective investments in the Company's portfolio. This type of derivative is traded OTC-bilateral and is exposed to market, credit and counterparty risk. The premium payment to the counterparty on these contracts is expensed as incurred. Derivative instruments used in hedging transactions that do not qualify for hedge accounting treatment are accounted for at fair value.

Written Credit Default Swaps used in Replication Transactions: A replication synthetic asset transaction is a derivative transaction (the derivative component) established concurrently with another fixed income instrument (the cash component) in order to "replicate" the investment characteristics of another instrument (the reference entity). As part of a strategy to replicate desired credit exposure in conjunction with high-rated host securities, the Company writes or sells credit default swaps on either single name corporate credits or credit indices and provides credit default protection to the buyer. This type of derivative instrument is traded OTC-bilateral, and the Company is exposed to market, credit and counterparty risk. The carrying value of credit default swaps used in RSATs represents the unamortized premium received/(paid) for selling the default protection. This premium is amortized into investment income over the life of the swap. The Company has negligible counterparty credit risk with the buyer.

The table below illustrates the effect of unrealized and realized gains and losses from derivative instruments in the Statements of Operations. Instruments utilizing hedge accounting treatment are shown as Qualifying Hedge Relationships. Instruments that utilize fair value accounting are shown as Non-qualifying Hedge Relationships. Derivatives used in Replication strategies are shown as Derivatives used for other than Hedging Purposes (in millions):

	Decem	per 31, 2017	Decembe	er 31, 2016			
	Unrealized Gain (Loss) Recognized in Surplus	Gain (Loss) Recognized in Net Realized Capital Gain (Loss)	Unrealized Gain (Loss) Recognized in Surplus	Gain (Loss) Recognized in Net Realized Capital Gain (Loss)			
Qualifying hedge relationships							
Foreign currency swap contract	\$ (2	1) \$ 6	\$ (1)	\$ (1)			
Total qualifying hedge relationships	(2	1) 6	(1)	(1)			
Non-qualifying hedge relationships	•						
Commodity forwards	(1	3) (40) —	_			
Foreign currency swaps	(54	4) 31	113	52			
Foreign currency forwards	(16	1) (132) 70	74			
Interest rate contracts	(1) —	(4)	_			
Purchased credit default swaps		<u> </u>	4				
Total non-qualifying hedge relationships	\$ (71	9) \$ (141) \$ 183	\$ 126			
Derivatives used for other than hedging purposes	_	- 5	_				
Total derivatives	\$ (74	(130)) \$ 182	\$ 125			

Events or circumstances that would require the Company to perform under a written credit derivative position may include, but are not limited to, bankruptcy, failure to pay, debt moratorium, debt repudiation, restructuring of debt and acceleration, or default. The maximum potential amount of future payments (undiscounted) the Company could be required to make under the credit derivative is represented by the notional amount of the contract. Should a credit event occur, the amounts owed to a counterparty by the Company may be subject to recovery provisions that include, but are not limited to:

- 1. Notional amount payment by the Company to Counterparty and/or delivery of physical security by Counterparty to the Company.
- 2. Notional amount payment by the Company to Counterparty net of contractual recovery fee.
- 3. Notional amount payment by the Company to Counterparty net of auction determined recovery fee.

The Company will record an impairment (realized loss) on a derivative position if an existing condition or set of circumstances indicates there is a limited ability to recover an unrealized loss.

Information related to the credit quality of replication positions where credit default swaps have been sold by the Company on indexes, individual debt obligations of corporations and sovereign nations appears below. Index positions represent replications where credit default swaps have been sold by the Company on the Dow Jones North American Investment Grade Series of indexes (DJ.NA.IG). Each index is comprised of 125 liquid investment grade credits domiciled in North America and represents a broad exposure to the investment grade corporate market. Index positions also represent replications where credit default swaps have been sold by the Company on the Dow Jones North American High Yield Series of indexes (DJ.NA.HY). Each index is comprised of 100 high yield credits domiciled in North America and represents a broad exposure to the high yield corporate market. The Company writes contracts on the Dow Jones North American Investment Grade Index Series 26 and 27 (DJ.NA.IG.26 and DJ.NA.IG.27, respectively), whereby the Company is obligated to perform should there be a default on any reference entity in the index.

The Company writes contracts on the "Senior" (7% to 15%) tranche of the Dow Jones North American Investment Grade Index Series 25, 27 and 29 (DJ.NA.IG.25, DJ.NA.IG.27 and DJ.NA.IG.29, respectively), whereby the Company is obligated to perform should the default rates of each index fall between 7%-15%. The Company also writes contracts on the "Senior" (35%-100%) tranche of the Dow Jones North American High Yield Index Series 27 (DJ.NA.HY.27), whereby the Company is obligated to perform should the default rate of the index fall between 35%-100%. The maximum potential amount of future payments (undiscounted) the Company could be required to make under these positions is represented by the notional amount of the contracts. The values are listed in order of their NAIC Credit Designation, with a designation of 1 having the highest credit quality and designations of 4 or below having the lowest credit quality based on the underlying asset referenced by the credit default swap (in millions):

			De	cer	nber 31, 201	17	December 31, 2016						
RSAT NAIC Designation	Referenced Credit Obligation	N	CDS otional mount		CDS stimated air Value	Weighted Average Years to Maturity	CDS Notional Amount		CDS Estimated Fair Value	Weighted Average Years to Maturity			
1 Highest	Single name credit default swaps	\$	5	\$	_	1	\$	5	\$ —	2			
quality	Credit default swaps on indices		5,967		185	4		5,957	67	4			
	Subtotal		5,972		185	4		5,962	67	4			
2 High	Single name credit default swaps		25		_	1		25	_	2			
High quality	Credit default swaps on indices		450		10	3		450	8	4			
	Subtotal		475		10	3		475	8	4			
3 Medium	Single name credit default swaps		10		_	1		40	6	4			
quality	Credit default swaps on indices		_		_	_		_	_	_			
	Subtotal		10		_	1		40	6	4			
	Total	\$	6,457	\$	195	4	\$	6,477	\$ 81	4			

The table below illustrates derivative asset and liability positions held by the Company, including notional amounts, carrying values and estimated fair values. Instruments utilizing hedge accounting treatment are shown as qualifying hedge relationships. Hedging instruments that utilize fair value accounting are shown as non-qualifying hedge relationships. Derivatives used in Replication strategies are shown as Derivatives used for other than hedging Purposes. The fair value of derivative assets and liabilities appear in the Statements of Admitted Assets, Liabilities and Capital and Contingency Reserves (in millions):

				Sum	mary of De	eri	vat	ive Pos	itio	ns		
		Dec	en	nber 31,	2017			De	cen	nber 31,	2016	
	N	otional	C	arrying Value	Estimated FV	t	N	otional		arrying Value	Estimated FV	
Qualifying hedge relationships						_						
Effective asset swaps												
Assets	\$	810	\$	_	\$ (36	3)	\$	_	\$	_	\$ —	
Liabilities		_		_	_	-		_		_	_	
Foreign currency swap contracts												
Assets		37		3	4	4		70		13	15	
Liabilities	_	158		(24)	(36	_	_	168		(14)	(30	
Total qualifying hedge relationships	\$	1,005	\$	(21)	\$ (68	3)	\$	238	\$	(1)	\$ (15	
Non-qualifying hedge relationships												
Commodity forwards												
Assets	\$	_	\$	_	\$ -	-	\$	_	\$	_	\$ —	
Liabilities		115		(18)	(18	3)		_		_	_	
Interest rate contracts												
Assets		66		3	;	3		109		4	4	
Liabilities		_		_	_	-		_		_		
Foreign currency swaps												
Assets		1,980		123	123	3		3,193		363	363	
Liabilities		3,449		(341)	(34)	1)		810		(36)	(36	
Foreign currency forwards												
Assets		129		2	2	2		2,405		91	91	
Liabilities		2,453		(73)	(73	3)		68		_	_	
Purchased credit default swaps												
Assets		_		_	_	-		_		_	_	
Liabilities		521		(14)	(14	4)		667		(11)	(11	
Total non-qualifying hedge relationships	\$	8,713	\$	(318)	\$ (318	3)	\$	7,252	\$	411	\$ 411	
Derivatives used for other-than-hedging purposes												
Written credit default swaps												
Assets	\$	6,417	\$	113	\$ 199	5	\$	6,437	\$	55	\$ 80	
Liabilities		40		_	_	_		40		(1)	_	
Asset swaps and total return swaps												
Assets		35		_	_	_		35		_		
Liabilities		_			_	-		_		_	_	
Total derivatives used for other-than-hedging						_	_					
purposes	\$	6,492	\$	113		5	\$	6,512	\$	54	\$ 80	
Total derivatives	\$	16,210	\$	(226)	\$ (19	1)	\$	14,002	\$	464	\$ 476	

Note 13 - Separate Accounts

The TIAA Separate Account VA-1 ("VA-1") is a segregated investment account established on February 16, 1994 under the insurance laws of the State of New York for the purpose of issuing and funding after-tax variable annuity contracts for employees of non-profit institutions organized in the United States, including governmental institutions. VA-1 is registered with the Securities and Exchange Commission, (the "Commission") effective November 1, 1994 as an open-end, diversified management investment company under the Investment Company Act of 1940. VA-1 consists of a single investment portfolio, the Stock Index Account ("SIA"). The SIA was established on October 3, 1994 and invests in a diversified portfolio of equity securities selected to track the overall market for common stocks publicly traded in the United States.

The TIAA Real Estate Separate Account ("REA" or "VA-2") is a segregated investment account organized on February 22, 1995, under the insurance laws of the State of New York for the purpose of providing an investment option to TIAA's pension customers to direct investments to an investment vehicle that invests primarily in real estate. VA-2 is registered with the Commission under the Securities Act of 1933 effective October 2, 1995. VA-2's target is to invest between 75% and 85% of its assets directly in real estate or in real estate-related investments, with the remainder of its assets invested in publicly-traded securities and other instruments easily converted to cash to maintain adequate liquidity.

The TIAA Separate Account VA-3 ("VA-3") is a segregated investment account organized on May 17, 2006 under the laws of the State of New York for the purposes of funding individual and group variable annuities for retirement plans of employees of colleges, universities, other educational and research organizations, and other governmental and non-profit institutions. VA-3 is registered with the Commission as an investment company under the Investment Company Act of 1940, effective September 29, 2006, and operates as a unit investment trust.

The TIAA Stable Value Separate Account ("TSV") is an insulated, non-unitized separate account established on March 31, 2010 qualifying under New York Insurance Law 4240(a)(5)(ii). The Separate Account supports a flexible premium group deferred fixed annuity contract intended to be offered to employer sponsored retirement plans. The assets of this account are carried at book value.

In accordance with the domiciliary state procedures for approving items within the separate accounts, the separate accounts classification of the following items are supported by a specific state statute:

Product Identification	Product Classification	State Statute Reference
TIAA Separate Account VA-1	Variable annuity	Section 4240 of the New York Insurance Law
TIAA Real Estate Separate Account	Variable annuity	Section 4240 of the New York Insurance Law
TIAA Separate Account VA-3	Variable annuity	Section 4240 of the New York Insurance Law
TIAA Stable Value	Group deferred fixed annuity	Section 4240(a)(5)(ii) of the New York Insurance Law

The legal insulation of the separate account assets prevents such assets from being generally available to satisfy claims resulting from the general account.

The Company's separate account statement includes legally insulated assets as of December 31 attributed to the following products (in millions):

Product	 2017	2016
TIAA Real Estate Separate Account	\$ 25,175	\$ 24,608
TIAA Separate Account VA-3	10,381	7,551
TIAA Separate Account VA-1	1,075	963
TIAA Stable Value	 965	 635
Total	\$ 37,596	\$ 33,757

In accordance with the products recorded within the separate account, some separate account liabilities are guaranteed by the general account. In accordance with the guarantees provided, if the investment proceeds are insufficient to cover the rate of return guaranteed for the product, the policyholder proceeds will be remitted by the general account.

The general account provides the Real Estate Separate Account with a liquidity guarantee to ensure it has funds available to meet participant transfer or cash withdrawal requests. When the Real Estate Separate Account cannot fund participant requests, the general account will fund the requests by purchasing accumulation units in the Real Estate Separate Account. Under this agreement, the Company guarantees participants will be able to redeem their accumulation units at their accumulation unit value determined after the transfer or withdrawal request is received in good order.

Additional information regarding separate accounts of the Company is as follows for the years ended December 31, (in millions):

2017								
ind Gua less	dexed arantee s than/	ind Gua mor	lexed rantee e than	Š	eparate		Total	
\$	460	\$	_	\$	4,547	\$	5,007	
\$	_	\$	_	\$	36,388	\$	36,388	
	932						932	
\$	932	\$		\$	36,388	\$	37,320	
\$	932	\$	_	\$	_	\$	932	
	_		_		36,388		36,388	
\$	932	\$	_	\$	36,388	\$	37,320	
	sind Guardian State of the Stat	\$ — 932 \$ 932 \$ —	indexed Guarantee less than	Non-indexed Guarantee less than/equal to 4%	Non-indexed Guarantee less than/equal to 4%	Non-indexed Guarantee less than/equal to 4% Non-indexed Guarantee more than 4% Non-guaranteed Separate Accounts \$ 460 \$ — \$ 4,547 \$ — \$ — \$ 36,388 932 — — — \$ 932 \$ — \$ 36,388 \$ — \$ — \$ 36,388	Non-indexed Guarantee less than/equal to 4%	

^{*}Withdrawable at book value without adjustment or charge.

2016

	ind Gua less	Non- dexed arantee s than/ al to 4%	ind Gua mo	Non- dexed arantee re than 4%	S	Non- aranteed eparate ccounts		Total
Premiums, considerations or deposits	\$	280	\$	_	\$	4,491	\$	4,771
Reserves								
For accounts with assets at:								
Fair value	\$	_	\$	_	\$	32,811	\$	32,811
Amortized cost		614						614
Total reserves	\$	614	\$		\$	32,811	\$	33,425
By withdrawal characteristics:								
Subject to discretionary withdrawal:								
At book value without market value adjustment and with current surrender charge of 5% or less*	\$	614	\$	_	\$	_	\$	614
At fair value						32,811		32,811
Total reserves	\$	614	\$		\$	32,811	\$	33,425

^{*}Withdrawable at book value without adjustment or charge.

				20	15		
	ind Gua less eq	lon- lexed rantee s than/ ual to 4%	ind Gua mor	on- exed rantee e than 1%	gua Se	Non- aranteed eparate ccounts	Total
Premiums, considerations or deposits	\$	156	\$	_	\$	4,102	\$ 4,258
Reserves							
For accounts with assets at:							
Fair value	\$	_	\$	_	\$	29,258	\$ 29,258
Amortized cost		394					 394
Total reserves	\$	394	\$		\$	29,258	\$ 29,652
By withdrawal characteristics:							
Subject to discretionary withdrawal:							
At book value without market value adjustment and with current surrender charge of 5% or less*	\$	394	\$	_	\$	_	\$ 394
At fair value		_		_		29,258	29,258
Total reserves	\$	394	\$	_	\$	29,258	\$ 29,652

^{*}Withdrawable at book value without adjustment or charge.

The following is a reconciliation of transfers to (from) the Company to the Separate Accounts for the years ended December 31, (in millions):

	2017	2016	2015
Transfers reported in the Summary of Operations of the separate accounts statement:			
Transfers to separate accounts	\$ 5,296	\$ 5,092	\$ 4,539
Transfers from separate accounts	(4,173)	(3,241)	(2,814)
Reconciling adjustments:			
Fund transfer exchange gain (loss)	 	 	
Transfers reported in the Summary of Operations of the Life, Accident & Health Annual Statement	\$ 1,123	\$ 1,851	\$ 1,725

Note 14 - Policy and Contract Reserves

Policy and contract reserves are determined in accordance with standard valuation methods approved by the Department and are computed in accordance with standard actuarial methodology. The reserves are based on assumptions for interest, mortality and other risks insured.

For annuities and supplementary contracts, policy and contract reserves are calculated using Commissioner's Annuity Reserve Valuation Method ("CARVM") in accordance with New York State Regulation 151, Actuarial Guideline 43 for variable annuity products and Actuarial Guideline 33 for all other products.

The Company has established policy reserves on deferred and payout annuity contracts issued January 1, 2001 and later that exceed the minimum amounts determined under Appendix A-820, "Minimum Life and Annuity Reserve Standards" of NAIC SAP. The excess above the minimum is as follows (in millions):

	1	12/31/2017	12/31/2016			
Additional Reserves for:						
Deferred and payout annuity contracts issued after 2000	\$	4,159	\$	4,115		

The Company performed Asset Adequacy Analysis in order to test the adequacy of its reserves in light of the assets supporting such reserves, and determined that its reserves are sufficient to meet its obligations.

For Ordinary and Collective Life Insurance, reserves for all policies are calculated in accordance with New York State Insurance Regulation 147. Reserves for regular life insurance policies are computed by the Net Level Premium method for issues prior to January 1, 1990, and by the Commissioner's Reserve Valuation Method for the vast majority of issues on and after such date. Five-year renewable term policies issued on or after January 1, 1994 use the greater of unitary and segmented reserves, where each segment is equal to the term period. Annual Renewable Term policies and Cost of Living riders issued on and after January 1, 1994 uses the segmented reserves, where each segment is equal to one year in length.

Liabilities for incurred but not reported life insurance claims and disability waiver of premium claims are based on historical experience and set equal to a percentage of paid claims. Reserves for amounts not yet due for incurred but not reported disability waiver of premium claims are a percentage of the total Active Lives Disability Waiver of Premium Reserve.

As of December 31, 2017 and 2016, the Company had \$364 million and \$405 million, respectively, of insurance in force for which the gross premiums were less than the net premiums according to the standard of valuation set by the Department.

The Tabular Interest, Tabular Less Actual Reserve Released and Tabular Cost are determined by formulae as prescribed by the NAIC except for deferred annuities, for which tabular interest is determined from the basic data.

Withdrawal characteristics of annuity actuarial reserves and deposit-type contract funds for the years ended December 31, are as follows (dollars in millions):

						2017			
		General Account	Acco	parate ount with irantees		Separate Account iguaranteed		Total	% of Total
Subject to discretionary withdrawal:									
At fair value	\$	_	\$	_	\$	36,388	\$	36,388	14.9%
At book value without adjustment (minimal or no charge or adjustment)		56,466		932		_		57,398	23.5%
Not subject to discretionary withdrawal		150,005		_		_		150,005	61.6%
Total (gross)	\$	206,471	\$	932	\$	36,388	\$	243,791	100.0%
Reinsurance ceded		_		_		_		_	
Total (net)	\$	206,471	\$	932	\$	36,388	\$	243,791	
						2016			
	_	General Account	Acco	parate ount with		2016 Separate Account guaranteed		Total	% of Total
Subject to discretionary withdrawal:			Acco	ount with		Separate Account		Total	% of Total
Subject to discretionary withdrawal: At fair value			Acco	ount with		Separate Account	\$	Total 32,811	% of Total
•	- \$		Acco Gua	ount with	Non	Separate Account iguaranteed	\$		70 01 0000
At fair value At book value without adjustment (minimal or	\$	Account	Acco Gua	ount with erantees —	Non	Separate Account iguaranteed	\$	32,811	14.0%
At fair value At book value without adjustment (minimal or no charge or adjustment)	\$	Account	Acco Gua	ount with erantees —	Non	Separate Account iguaranteed	\$	32,811 54,158	14.0%
At fair value At book value without adjustment (minimal or no charge or adjustment) Not subject to discretionary withdrawal	_	53,544 146,757	Acco Gua \$	ount with arantees 614	Non	Separate Account Iguaranteed 32,811	_	32,811 54,158 146,757	14.0% 23.2% 62.8%

Note 15 - Management Agreements

Under Cash Disbursement and Reimbursement Agreements, the Company serves as the common pay-agent for certain subsidiaries and affiliates. Under management agreements, the Company provides investment advisory and administrative services for TIAA-CREF Life Insurance Company ("TIAA-CREF Life") and administrative services to TIAA, FSB and VA-1. Additionally, effective December 26, 2016, the Company entered into a General Service and Facilities Agreements with its wholly-owned subsidiary, Nuveen, for the Company to provide and receive general services at cost inclusive of charges for overhead.

The Company allocated expenses of \$2,252 million, \$2,080 million and \$2,083 million to its various subsidiaries and affiliates for the years ended December 31, 2017, 2016 and 2015, respectively. These allocated expenses are not included in the Company's net operating expenses. The expense allocation process determines the portion of the total investment and operating expenses attributable to each legal entity and each line of business within an entity. Every month the Company allocates incurred expenses to each line of business and its affiliates. As part of this allocation process, every department with personnel and every vendor related expense is allocated to lines of business based on defined allocation methodologies. These methodologies represent either shared or direct costs depending on the nature of the service provided. At the completion of the allocation process all expenses are assigned to a line of business and legal entity.

Activities necessary for the operation of the College Retirement Equities Fund ("CREF"), a companion organization, are provided at-cost by the Company and two of its subsidiaries. Such services are provided in accordance with an Investment Management Services Agreement, updated and amended annually as of May 1, between CREF and TIAA-CREF Investment Management, LLC ("Investment Management"), and in accordance with a Principal Underwriting and Distribution Services Agreement for CREF, updated and amended annually as of May 1, between CREF and TIAA-CREF Individual and Institutional Services, LLC ("Services"). The Company also performs administrative services for CREF, on an at-cost basis in accordance with an Administrative Service Agreement, updated and amended annually as of May 1. The management fees collected under these agreements and the equivalent allocated expenses, which amounted to approximately \$808 million, \$860 million, and \$971 million for the years ended

December 31, 2017, 2016 and 2015, respectively, are not included in the statement of operations and have no effect on the Company's operations.

Teachers Advisors, LLC ("Advisors") provides investment advisory services for VA-1, certain proprietary funds and other separately managed portfolios in accordance with investment management agreements. Teachers Personal Investors Services, Inc. ("TPIS") and Services distribute variable annuity contracts for VA-1, REA and VA-3 as well as registered securities for certain proprietary funds and non-proprietary mutual funds.

All services necessary for the operation of REA are provided at-cost by the Company and Services. The Company provides investment management and administrative services for REA. Distribution services for REA are provided in accordance with a Distribution Agreement among Services, the Company and REA. The Company and Services receive fee payments from REA on a daily basis according to formulae established annually and adjusted periodically. The daily fee is based on an estimate of the at-cost expenses necessary to operate REA and is based on projected REA expense and asset levels, with the objective of keeping the fees as close as possible to actual expenses attributable to operating REA. At the end of each quarter, any differences between the daily fees paid and actual expenses for the quarter are added to or deducted from REA's fee in equal daily installments over the remaining days in the immediately following quarter.

The Bank services certain residential mortgage loans held by the Company. As of December 31, 2017 and 2016, the Company held \$907 million and \$1,004 million of residential mortgage loans serviced by the Bank, respectively.

Note 16 - Federal Income Taxes

By charter, the Company is a stock life insurance company operating on a non-profit basis. However, the Company has been fully subject to federal income taxation as a stock life insurance company since January 1, 1998.

The application of SSAP No. 101 requires a company to evaluate the recoverability of deferred tax assets and to establish a valuation allowance if necessary to reduce the deferred tax asset to an amount which is more likely than not to be realized. Based on the weight of all available evidence, the Company has not recorded a valuation allowance on deferred tax assets at December 31, 2017 or December 31, 2016.

Components of the net deferred tax asset/(liability) are as follows (in millions):

				12/31	1/2017			12/31/2016								Cha	Change			
			(1)	(2) (3) (Col 1+2)			(4)			(5)	(6) (Col 4+5)		(C	(7) ol 1–4)	(E (Col		(9) (Col 7			
		Or	dinary	Ca	pital	` To	otal ´	0	rdinary	Ca	pital	`1	Γotal ΄	Òr	dinarý	`Cap	ital	` Tota		
a)	Gross Deferred Tax Assets	\$	6,586	\$	205	\$	6,791	\$	10,734	\$	621	\$	11,355	\$	(4,148)	\$	(416)	\$ (4,	564)	
b)	Statutory Valuation Allowance Adjustments		_		_		_		_		_		_				_			
c)	Adjusted Gross Deferred Tax Assets (a–b)		6,586		205		6,791		10,734		621		11,355		(4,148)		(416)	(4,	564)	
d)	Deferred Tax Assets Non-admitted		3,720		_		3,720		7,030		_		7,030		(3,310)		_	(3,	310)	
e)	Subtotal Net Admitted Deferred Tax Asset (c- d)		2,866		205		3,071		3,704		621		4,325		(838)		(416)	(1,	254)	
f)	Deferred Tax Liabilities		413		694		1,107		135		982		1,117		278		(288)		(10)	
g)	Net Admitted Deferred Tax Assets/(Net Deferred Tax Liability) (e-f)	\$	2,453	\$	(489)	\$	1,964	\$	3,569	\$	(361)	\$	3,208	\$	(1,116)	\$	(128)	\$ (1,	244)	

			12/31/2017	7		12/31/2016			Change	
	mission Calculation imponents SSAP No. 101	(1) Ordinary	(2) Capital	(3) (Col 1+2) Total	(4) Ordinary	(5) Capital	(6) (Col 4+5) Total	(7) (Col 1–4) Ordinary	(8) (Col 2–5) Capital	(9) (Col 7+8) Total
a)	Federal Income Taxes Paid In Prior Years Recoverable Through Loss Carrybacks	\$ -	- \$ -	- \$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
b)	Adjusted Gross DTA Expected To Be Realized (Excluding The Amount of DTA From (a) above After Application of the Threshold Limitation.(The Lesser of (b)1 and (b)2 Below)	1,92	1 43	3 1,964	3,101	107	3,208	(1,180)	(64)	(1,244)
	Adjusted Gross DTA Expected to be Realized Following the Balance Sheet Date	1,92	1 43	3 1,964	3,101	107	3,208	(1,180)	(64)	(1,244)
	2. Adjusted Gross DTA Allowed per Limitation Threshold	XX	x xxx	(5,151	XXX	XXX	4,851	XXX	xxx	300
c)	Adjusted Gross DTA (Excluding The Amount Of DTA From (a) and (b) above) Offset by Gross DTL	94	5 162	2 1,107	603	514	1,117	342	(352)	(10)
d)	DTA Admitted as the result of application of SSAP No. 101. Total ((a) +(b)+(c))	\$ 2,86	6 \$ 205	5 \$ 3,071	\$ 3,704	\$ 621	\$ 4,325	\$ (838)	\$ (416)	\$ (1,254)

	2017	2016
Ratio percentage used to determine recovery period and threshold limitation amount	812%	990%
Amount of adjusted capital and surplus used to determine the threshold limitation in (b)2 above (in millions)	\$34,340	\$32,343

		12/31	/20)17		12/31	/20	16		Cha	nge	,
Impact of Tax Planning Strategies: (dollars in millions)		(1)		(2)		(3)		(4)	<i>(</i>	(5) Col 1–3)	<i>(</i> ((6) Col 2–4)
(20.200	0	rdinary		Capital	(Ordinary		Capital		Ordinary		Capital
Determination of adjusted gross DTAs and net admitted DTAs, by tax character as a percentage												
Adjusted Gross DTAs Amount From Above	\$	6,586	\$	205	\$	10,734	\$	621	\$	(4,148)	\$	(416)
Percentage Of Adjusted Gross DTAs By Tax Character Attributable To The Impact Of Tax Planning Strategies		—%		— %)	—%		—%		- %		—%
Net Admitted Adjusted Gross DTAs Amount From Above	\$	2,866	\$	205	\$	3,704	\$	621	\$	(838)	\$	(416)
Percentage Of Net Admitted Adjusted Gross DTAs By Tax Character Admitted Because Of The Impact Of Tax Planning Strategies		7.33%		— %)	9.70%		—%		(2.37)%		- %

The Company does not have tax-planning strategies that include the use of reinsurance.

The Company has no temporary differences for which deferred tax liabilities are not recognized.

Income taxes incurred consist of the following major components (in millions):

	12	2/31/2017	12	2/31/2016	12/31/2015
Current Income Tax:	-				
Federal income tax expense (benefit)	\$	(698)	\$	(484)	\$ (603)
Foreign taxes					 _
Subtotal	\$	(698)	\$	(484)	\$ (603)
Federal income taxes expense on net capital gains		619		1,089	405
Generation/(utilization) of loss carry-forwards		79		(605)	198
Intercompany tax sharing expense/(benefit)		11		17	(83)
Other		(15)		(1)	_
Federal and foreign income tax expense / (benefit)	\$	(4)	\$	16	\$ (83)
	12	2/31/2017	12	2/31/2016	 Change
Deferred Tax Assets:					
Ordinary:					
Policyholder reserves	\$	543	\$	248	\$ 295
Investments		772		1,564	(792)
Deferred acquisition costs		15		24	(9)
Policyholder dividends accrual		395		675	(280)
Fixed assets		257		387	(130)
Compensation and benefits accrual		168		253	(85)
Receivables – non-admitted		43		104	(61)
Net operating loss carry-forward		816		1,349	(533)
Tax credit carry-forward		21		42	(21)
Other (including items < 5% of total ordinary tax assets)		481		599	(118)
Intangible assets – business in force and software		3,075		5,489	(2,414)
Subtotal	\$	6,586	\$	10,734	\$ (4,148)
Statutory valuation allowance adjustment	\$	_	\$	_	\$ _
Non-admitted		3,720		7,030	(3,310)
Admitted ordinary deferred tax assets	\$	2,866	\$	3,704	\$ (838)
Capital:					
Investments	\$	186	\$	621	\$ (435)
Real estate		19		_	19
Subtotal	\$	205	\$	621	\$ (416)
Statutory valuation allowance adjustment		_		_	_
Non-admitted		_		_	
Admitted capital deferred tax assets		205		621	 (416)
Admitted deferred tax assets	\$	3,071	\$	4,325	\$ (1,254)

	12/31/2017		12/	31/2016	Change		
Deferred Tax Liabilities:							
Ordinary:							
Investments	\$	_	\$	129	\$	(129)	
Reserves transition adjustment		410		_		410	
Other (including items < 5% of total ordinary tax liabilities)		3		6		(3)	
Subtotal	\$	413	\$	135	\$	278	
Capital:							
Investments		694		982		(288)	
Subtotal	\$	694	\$	982	\$	(288)	
Deferred tax liabilities	\$	1,107	\$	1,117	\$	(10)	
Net Deferred Tax:							
Assets/Liabilities	\$	1,964	\$	3,208	\$	(1,244)	

The provision for federal and foreign income taxes incurred differs from the amount obtained by applying the statutory federal income tax rate to income before income taxes. The significant items causing this difference at December 31, 2017 are as follows (in millions):

Description	Tax	c Effect	Effective Tax Rate
Provision computed at statutory rate	\$	574	35.00 %
Dividends received deduction		(67)	(4.09)%
Amortization of interest maintenance reserve		(68)	(4.15)%
Statutory impairment of affiliated common stock		108	6.59 %
Tax effect of unrealized capital (loss) gain		236	14.39 %
Rate change due to Tax Cuts and Jobs Act		3,789	231.04 %
Other		(22)	(1.34)%
Total statutory income taxes		4,550	277.44 %
Federal and foreign income tax incurred (benefit) expense	\$	(4)	(0.24)%
Rate change due to Tax Cuts and Jobs Act		3,789	231.04 %
Change in net deferred income tax charge (benefit)		765	46.64 %
Total statutory income taxes	\$	4,550	277.44 %

At December 31, 2017, the Company has net operating loss carry forwards with expiration dates through the year 2032 (in millions):

Year Incurred	erating Loss	Year of Expiration
2004	\$ 157	2019
2008	1,017	2023
2012	1,291	2027
2014	445	2029
2015	787	2030
2016	2	2031
2017	187	2032
Total	\$ 3,886	

At December 31, 2017, the Company has foreign tax credit carry forwards with expiration dates through the year 2025 (in millions):

Year Incurred	ign Tax redit	Year of Expiration
2013	\$ 4	2023
2014	13	2024
2015	 5	2025
Total	\$ 22	

At December 31, 2017, and 2016, the Company has no capital loss carry forwards.

At December 31, 2017, the Company has general business credits of \$32 million generated during the years 2004 to 2016 and expiring between 2024 to 2036.

The Company did not incur federal income taxes expense for 2017 or preceding years that would be available for recoupment in the event of future net losses.

The Company does not have any protective tax deposits on deposit with the Internal Revenue Service under IRC Section 6603.

Beginning in 1998, the Company filed a consolidated federal income tax return with its includable affiliates (the "consolidating companies"). The consolidating companies participate in tax-sharing agreements. Under the general agreement, which applies to all of the below listed entities except those denoted with an asterisk (*), current federal income tax expense (benefit) is computed on a separate return basis and provides that members shall make payments or receive reimbursements to the extent their income (loss) contributes to or reduces consolidated federal tax expense. The consolidating companies are reimbursed for net operating losses or other tax attributes they have generated when utilized in the consolidated return.

- 1) 730 Texas Forest Holdings, Inc.
- 2) AMC Holding, Inc.
- 3) Business Property Lending, Inc.
- 4) Covariance Capital Management, Inc.
- 5) CustomerOne Financial Network, Inc.
- 6) Elite Lender Services, Inc.
- 7) EverBank Commercial Finance, Inc.
- 8) EverBank Financial Corp.
- 9) EverBank Wealth Management, Inc.
- 10) EverInsurance, Inc.
- 11) EverTrade Direct Brokerage, Inc.
- 12) GreenWood Resources, Inc.
- 13) JWL Properties, Inc.
- 14) MyVest Advisors Corporation
- 15) MyVest Corporation
- 16) ND Properties, Inc.
- 17) NIS/R&T, Inc. f/k/a Nuveen Investment Solutions, Inc.*
- 18) Nuveen Holdings, Inc.*
- 19) Nuveen Holdings I, Inc. *
- 20) Nuveen Investments, Inc.*

- 21) Nuveen Investments Holdings, Inc.*
- 22) Nuveen Securities, LLC*
- 23) Oleum Holding Company, Inc.
- 24) T-C Europe Holdings, Inc.
- 25) T-C SP, Inc.
- 26) T-Investment Properties Corp.
- 27) TCT Holdings, Inc.
- 28) Teachers Personal Investors Service, Inc.
- 29) Terra Land Company
- 30) TIAA-CREF Life Insurance Company
- 31) TIAA Board of Overseers
- 32) TIAA-CREF Tuition Financing, Inc.
- 33) TIAA-CREF Trust Company, FSB
- 34) Tygris Asset Finance, Inc.
- 35) Tygris Commercial Finance Group, Inc.
- 36) Westchester Group Asset Management, Inc.
- 37) Westchester Group Farm Management, Inc.
- 38) Westchester Group Investment Management, Inc.
- 39) Westchester Group Investment Management Holding Company, Inc.
- 40) Westchester Group Real Estate, Inc.

The companies denoted with an asterisk above (collectively, "Nuveen subgroup"), are subject to a separate tax sharing agreement, under which current federal income tax expense (benefit) is computed on a separate subgroup return basis. Under the Agreement, Nuveen Holdings I, Inc. makes payments to TIAA for amounts equal to the federal income payments that the Nuveen subgroup would be obliged to pay the federal government if the Nuveen subgroup

had actually filed a separate consolidated tax return. Nuveen Holdings I, Inc. is reimbursed for the subgroup losses to the extent that the subgroup tax return reflects a tax benefit that the Nuveen subgroup could have carried back to a prior consolidated return year. However, in the event the TIAA consolidated group owes Alternative Minimum Tax ("AMT") in a given year, Nuveen Holdings I, Inc. will pay or receive reimbursements for its allocable share of tax, in an amount equal to the ratio that its standalone AMT liability bears to that of the consolidated group's liability.

Amounts receivable from / (payable to) the Company's subsidiaries for federal income taxes are (\$17) million and (\$22) million at December 31, 2017 and 2016, respectively.

The Company's tax years 2010 through 2012 and 2014 through 2017 are open to examination by the IRS.

The Tax Cuts and Jobs Act (the "Act") was signed into law by the President on December 22, 2017. The Act changes existing United States tax law and includes numerous provisions that will affect businesses. The Act reduces the U.S. corporate tax rate from 35% to 21%, includes several base broadening provisions, as well as, reform to the US international tax system.

The Company's deferred tax assets and liabilities as of December 31, 2017 reflect the enacted tax rate of 21% which is expected to apply when the deferred tax assets and liabilities will be settled or realized. The change in net deferred taxes due to the re-measurement of the deferred tax assets and liabilities is \$3,789 million and impacts the 2017 effective tax rate by 231%. Furthermore, the Company has evaluated and considered the impacts of the Act to our assessment of the realizability of our deferred tax assets and have concluded that no change as of December 31, 2017 is necessary.

In February 2018 the NAIC issued *INT 18-01: Updated Tax Estimates under the Tax Cuts and Jobs Act* to address the application of statutory accounting principles when a reporting entity does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the Act.

The impact of the Act to DTA admissibility under SSAP 101 is currently under evaluation. Our net admitted DTA is computed based on reasonable estimates and guidance available as of the date of this filing.

In evaluating the impact of reform to the US international tax system, the Company has estimated that no material liability will be due for the transition tax provisions provided in the Act.

Any subsequent adjustment to these amounts will be recorded in the period when the information necessary to update the estimate becomes available.

Note 17 - Pension Plan and Post-retirement Benefits

The Company maintains a qualified, non-contributory defined contribution money purchase plan covering substantially all employees. All employee plan liabilities are fully funded through retirement annuity contracts. Contributions are made to each participant's contract based on a percentage of salary, with the applicable percentage varying by attained age. All contributions are fully vested after three years of service. Forfeitures arising from terminations prior to vesting are used to reduce future employer contributions. The statements of operations include contributions to the plan of approximately \$58 million, \$55 million and \$53 million for the years ended December 31, 2017, 2016 and 2015, respectively. This includes supplemental contributions made to company-owned annuity contracts under a non-qualified deferred compensation plan.

The Company previously provided pension benefits through an unfunded Supplemental Executive Retirement Plan ("SERP") to certain select executives and any TIAA associate deemed eligible by the Board of Trustees. The SERP provided an annual retirement benefit payable at normal retirement. The obligations of the Company under the SERP are unfunded, unsecured promises to make future payments. As such, the plan has no assets. Contributions for a given period are equal to the benefit payments for that period. The benefit obligation and net periodic benefit cost of this plan for the years ended December 31, are as follows (in millions):

		SERP							
	2	2017			2015				
Benefit obligation	\$	41	\$	42	\$	44			
Net period benefit cost	\$	2	\$	2	\$	2			

In addition to the defined contribution plan and SERP, the Company provides certain other post-retirement life and health insurance benefits to eligible retired employees who meet prescribed age and service requirements. The benefit obligation and net periodic benefit cost of this plan for the years ended December 31, are as follows (in millions):

		Post-retirement Benefits								
	2017			2016	2015					
Benefit obligation	\$	102	\$	94	\$	104				
Net period benefit cost	\$	1	\$	2	\$	4				

Note 18 - Reinsurance

Reinsurance transactions included in the statutory basis statements of operations "Insurance and annuity premiums and other considerations" are as follows (in millions):

	Years Ended December 31,									
		2017	2016	2015						
Direct premiums	\$	16,657 \$	16,608 \$	13,673						
Ceded premiums		(13)	(14)	(14)						
Net premiums	\$	16,644 \$	16,594 \$	13,659						

The Company enters into reinsurance agreements in the normal course of its insurance business to reduce overall risk. The Company remains liable for reinsurance ceded if the reinsurer fails to meet its obligation on the business assumed. All reinsurance is placed with unaffiliated reinsurers. A liability is established for reserves ceded to unauthorized reinsurers which are not secured by or in excess of letters of credit or trust agreements. The Company does not have reinsurance agreements in effect under which the reinsurer may unilaterally cancel the agreement. Amounts shown in the financial statements are reported net of the impact of reinsurance.

Note 19 - Repurchase and Securities Lending Programs

Repurchase Program

The Company has a repurchase program to sell and repurchase securities for the purposes of providing additional liquidity. For repurchase agreements, the Company's policy requires a minimum of 95% of the fair value of securities transferred under repurchase agreements to be maintained as collateral.

The Company has procedures in place to monitor the value of the collateral held and the fair value of the securities transferred under the agreements. If at any time the value of the collateral received from the counterparty falls below 95% of the fair value of the securities transferred, the Company is entitled to receive additional collateral from its counterparty. The Company monitors the estimated fair value of the securities sold under the agreements on a daily basis with additional collateral sent/obtained a necessary. If the counterparty were to default on its obligation to return the securities sold under the agreement on the repurchase date, the Company has the right to retain the collateral.

During the years ended December 31, 2017 and 2016, the Company engaged in certain repurchase transactions as cash taker. These transactions were "bilateral" in nature and the Company did not engage in any "Tri-party" repurchase transactions during the year. Additionally, there were no securities sold during the years ended December 31, 2017 and 2016 that resulted in default.

As of December 31, 2017 and 2016, the Company had no outstanding repurchase agreements.

Securities Lending Program

The Company has a securities lending program whereby it may lend securities to qualified institutional borrowers to earn additional income. The Company receives collateral (in the form of cash) against the loaned securities and maintains collateral in an amount not less than 102% of the market value of loaned securities during the period of the loan; any additional collateral required due to changes in security values is delivered to the Company the next business day. Cash collateral received by the Company will generally be invested in high-quality short-term instruments or bank deposits.

As of December 31, 2017, the estimated fair value of the Company's securities on loan under the program was \$689 million. The estimated fair value of collateral held by the Company for the bonds on loan as of December 31, 2017, was reported in "Securities lending collateral assets" with an offsetting collateral liability of \$706 million included in "Payable for collateral for securities loaned". This collateral received is cash and has not been sold or re-pledged as of December 31, 2017.

Of the cash collateral received from the program, \$516 million is held as cash as of December 31, 2017, with the remaining \$190 million invested in overnight Treasury reverse repurchase agreements. Thus, the collateral remains liquid and could be returned in the event of a collateral call. The amortized cost and fair value of the reinvested cash collateral by the maturity date of the invested asset is as follows (in millions):

	Amorti	ized Cost	Fair Value		
Open	\$	516	\$	516	
30 Days or less		190		190	
Total collateral reinvested	\$	706	\$	706	

As of December 31, 2016 the estimated fair value of the Company's securities on loan under the program was \$634 million. The estimated fair value of collateral held by the Company for the bonds on loan as of December 31, 2016, was reported in "Securities lending collateral assets" with an offsetting collateral liability of \$649 million included in "Payable for collateral for securities loaned." This collateral received was cash and had not been sold or re-pledged as of December 31, 2016.

Of the cash collateral received from the program, \$394 million was held as cash as of December 31, 2016, with the remaining \$255 million invested in overnight Treasury reverse repurchase agreements. Thus, the collateral was liquid and could have been returned in the event of a collateral call. The amortized cost and fair value of the reinvested cash collateral by the maturity date of the invested asset is as follows (in millions):

	Amorti	zed Cost	Fair Value		
Open	\$	394	\$	394	
30 Days or less		255		255	
Total collateral reinvested	\$	649	\$	649	

Note 20 - Federal Home Loan Bank of New York Membership and Borrowings

The Company is a member of the Federal Home Loan Bank of New York ("FHLBNY"). Through its membership, the Company has the ability to conduct business activity ("Advances") with the FHLBNY. It is part of the Company's strategy to utilize these funds to provide additional liquidity to supplement existing sources, and can also be a source of contingent liquidity to meet other requirements. The Company is required to pledge collateral to the FHLBNY in

the form of eligible securities for all advances received. The Company considers the amount of collateral pledged to the FHLBNY as the amount encumbered by advances from the FHLBNY at a point in time. The Company has determined the estimated maximum borrowing capacity as about \$14,757 million. The Company calculated this amount using 5% of total net admitted assets at the current reporting date.

The following table shows the FHLBNY capital stock held as of December 31, (in millions):

	2016										
Total			General Account		Separate Account		Total	General Account		Separate Account	
\$	_	\$		\$		\$		\$		\$	
	81		81		_		101		101		_
	_		_		_		_		_		_
	_		_		_		_		_		_
\$	81	\$	81	\$		\$	101	\$	101	\$	
		\$ — 81 — —	Total Ger Acc	Total Account \$ — 81 81 — — — —	Total General Account Seq Ac \$ — \$ 81 81 — — — —	Total General Account Separate Account \$ — \$ — 81 81 — — — — — — —	Total General Account Separate Account \$ - \$ - \$ 81 81 - - - - - - - - - - - - - - -	Total General Account Separate Account Total \$ - \$ - \$ - 81 81 - 101 - - - - - - - - - -	Total General Account Separate Account Total General Account \$ - \$ - \$ 81 81 - 101 - - - - - - - -	Total General Account Separate Account Total General Account \$ - \$ - \$ - 81 81 - 101 101 - - - - - - - - - -	Total General Account Separate Account Total General Account Separate Account \$ — \$ — \$ — \$ 81 81 — 101 101 101 — — — — — —

Membership stock at December 31, 2017 and 2016, is not eligible for redemption.

The Company did not have any borrowings outstanding as of December 31, 2017 or 2016. Therefore, no collateral was pledged by the Company to the FHLBNY as of either year end.

The following table shows the maximum collateral pledged to FHLBNY during the year ending December 31, (in millions):

		2017						2016						
	Fair Value		Bo at Fair Carrying Ma			nount rowed ime of ximum lateral	Fair	Value		rrying alue	Amount Borrowed at Time of Maximum Collateral			
General account	\$	670	\$	620	\$	615	\$	627	\$	521	\$	575		
Separate account		_		_		_		_		_		_		
Total	\$	670	\$	620	\$	615	\$	627	\$	521	\$	575		

The following table shows the maximum borrowing from FHLBNY during the year ending December 31, (in millions):

	2017							2016							
		otal		General Account		Separate Account		Total	General Account		Separate Account				
Debt	\$	615	\$	615	\$	_	\$	575	\$	575	\$	_			
Funding agreements		_		_		_		_		_		_			
Other		_		_		_		_		_		_			
Total	\$	615	\$	615	\$		\$	575	\$	575	\$				

Note 21 – Capital and Contingency Reserves and Shareholders' Dividends Restrictions

The portion of contingency reserves represented or reduced by each item below for the years ended December 31 are as follows (in millions):

	2017	2016
Change in net unrealized capital gains (losses)	\$ 1,070	\$ (481)
Change in asset valuation reserve	(1,221)	(257)
Change in net deferred income tax	(4,554)	(272)
Change in non-admitted assets	3,402	364
Change in post-retirement benefit liability	(5)	4

As of December 31, 2017 and 2016, the portion of contingency reserves represented by cumulative net unrealized gains was \$2,857 million and \$1,787 million, gross of deferred taxes, respectively.

Capital: The Company has 2,500 shares of Class A common stock authorized, issued and outstanding. All of the outstanding common stock of the Company is held by the TIAA Board of Overseers, a not-for-profit corporation created for the purpose of holding the common stock of the Company. By charter, the Company operates without profit to its sole shareholder.

Surplus Notes: On May 8, 2017, the Company issued surplus notes in an aggregate principal amount of \$2,000 million. The notes bear interest at an annual rate of 4.270%, and have a maturity date of May 15, 2047. Proceeds from the issuance of the notes were \$1,994 million, net of issuance discount. Interest on the notes is scheduled to be paid semiannually on May 15 and November 15 of each year through the maturity date.

In May 2017, the Company completed a tender offer in which it extinguished \$950 million principal of its 6.850% surplus notes issued on December 16, 2009 and due to mature on December 16, 2039. The 2017 interest paid was \$26 million and total interest paid was \$481 million on the tendered notes. The Company paid a premium of \$373 million due to the early redemption of these surplus notes which is reported in net operating expenses.

The following table provides information related to the Company's outstanding surplus notes as of December 31, 2017 (in millions):

Date Issued	Interest Rate	Par Value (Face Amount of Notes)			Amount Carrying Value Interest Paid					Date of Maturity		
12/16/2009	6.850%	\$	1,050	\$	1,049	\$	72	\$	575	12/16/2039		
09/18/2014	4.900%		1,650		1,649		81		242	09/15/2044		
09/18/2014	4.375% *		350		349		15		46	09/15/2054		
05/08/2017	4.270%		2,000		1,994		44		44	05/15/2047		
Total		\$	5,050	\$	5,041	\$	212	\$	907			

*The Company will bear interest at a fixed annual rate of 4.375% from and including September 18, 2014 to but excluding September 15, 2024 payable semi-annually in arrears on March 15 and September 15 of each year, commencing March 15, 2015, then at an annual floating rate equal to Three-Month LIBOR plus 2.661% from and including September 15, 2024 to but excluding the date on which the Fixed-to-Floating Rate Notes are paid in full, payable quarterly, in arrears on March 15, June 15, September 15 and December 15 of each year, commencing December 15, 2024.

The instruments listed in the above table, are unsecured debt obligations of the type generally referred to as "surplus notes" and are issued in accordance with Section 1307 of the New York Insurance Law. The surplus notes are subordinated in right of payment to all present and future indebtedness, policy claims and other creditor claims of the Company and rank *pari passu* with any future surplus notes of the Company and with any other similarly subordinated obligations.

The notes were issued in transactions pursuant to Rule 144A under the Securities Act of 1933, as amended, and the notes are evidenced by one or more global notes deposited with a custodian for, and registered in the name of a nominee of, The Depository Trust Company.

No subsidiary or affiliate of the Company is an obligor or guarantor of the notes, which are solely obligations of the Company. No affiliates of the Company hold any portion of the notes.

The notes are unsecured and subordinated to all present and future indebtedness, policy claims and other creditor claims of the Company. Under New York Insurance Law, the notes are not part of the legal liabilities of the Company. The notes are not scheduled to repay any principal prior to maturity. Each payment of interest and principal may be made only with the prior approval of the Superintendent and only out of the Company's surplus funds, which the Superintendent of the Department determines to be available for such payments under New York Insurance Law. In

addition, provided that approval is granted by the Superintendent of the Department, the notes may be redeemed at the option of the Company at any time at the "make-whole" redemption price equal to the greater of the principal amount of the notes to be redeemed, or the sum of the present values of the remaining scheduled interest and principal payments, excluding accrued interest as of the redemption date, discounted to the redemption date on a semi-annual basis at the adjusted Treasury rate plus a pre-defined spread, plus in each case, accrued and unpaid interest payments on the notes to be redeemed to the redemption date.

Dividend Restrictions: Under the New York Insurance Law, the Company is permitted without prior insurance regulatory clearance to pay a stockholder dividend as long as the aggregated amount of all such dividends in any calendar year does not exceed the lesser of (i) 10% of its surplus to policyholders as of the immediately preceding calendar year and (ii) its net gain from operations for the immediately preceding calendar year (excluding realized investment gains). The Company has not paid dividends to its shareholder.

Note 22 - Contingencies and Guarantees

Subsidiary and Affiliate Guarantees:

At December 31, 2017, the Company has a financial support agreement with TIAA-CREF Life. Under this agreement, the Company will provide support so TIAA-CREF Life will have the greater of (a) capital and surplus of \$250 million, (b) the amount of capital and surplus necessary to maintain TIAA-CREF Life's capital and surplus at a level not less than 150% of the NAIC Risk Based Capital model or (c) such other amount as necessary to maintain TIAA-CREF Life's financial strength rating at least the same as the Company's rating at all times. Since this obligation is not subject to limitations, the Company does not believe that it is possible to determine the maximum potential amount that could become due under these guarantees in the future. At December 31, 2017, the capital and surplus of TIAA-CREF Life Insurance Company was in excess of the minimum capital and surplus amount referenced, and its total adjusted capital was in excess of the referenced RBC-based amount calculated at December 31, 2017.

The Company has agreed that it will cause TIAA-CREF Life Insurance Company ("TIAA-CREF Life"), a direct wholly owned subsidiary, to be sufficiently funded at all times in order to meet all its contractual obligations on a timely basis including, but not limited to, obligations to pay policy benefits and to provide policyholder services. This agreement is not an evidence of indebtedness or an obligation or liability of the Company and does not provide any creditor of TIAA-CREF Life with recourse to or against any of the assets of the Company.

Additionally, the Company has the following agreements and lines of credit with subsidiaries, affiliates, and other related parties:

Related to the 2014 acquisition of Nuveen Investments, Inc., Nuveen Finance, the Acquirer and an indirectly owned subsidiary of TIAA, recorded contingent purchase related liabilities which are payable based upon contractual terms during 2017 and 2018. The Company has agreed to fund these obligations in the event required payments to the Seller are not made by Nuveen Finance. Nuveen Finance paid \$169 million of the liability during 2017, resulting in a remaining liability of \$109 million as of December 31, 2017.

The Company provides a \$100 million unsecured 364-day revolving line of credit arrangement with TIAA-CREF Life. This line has an expiration date of July 9, 2018. As of December 31, 2017, \$30 million of this facility was maintained on a committed basis, and there were no balances outstanding.

The Company also provides a \$1,000 million uncommitted line of credit to certain accounts of CREF and certain TIAA-CREF Funds ("Funds"). Loans under this revolving credit facility are for a maximum of 60 days and are made solely at the discretion of the Company to fund shareholder redemption requests or other temporary or emergency needs of CREF and the Funds. As of December 31, 2017, there were no balances outstanding. It is the intent of the Company, CREF and the Funds to use this facility as a supplemental liquidity facility, which would only be used after CREF and the Funds have exhausted the availability of the current \$1,500 million committed credit facility maintained with a group of banks.

The Company guarantees CREF transfers to the Company for the immediate purchase of lifetime payout annuities will produce guaranteed payments that will never be less than the amounts calculated at the stipulated interest rate and mortality defined in the applicable CREF contract.

The Company provides a \$300 million unsecured and uncommitted 364-day revolving line of credit arrangement with TIAA, FSB. This line has an expiration date of September 12, 2018. As of December 31, 2017, there were no balances outstanding.

The Company also provides a \$100 million committed 364-day revolving line of credit arrangement with Nuveen, Investments, Inc. This line has an expiration date of December 30, 2018. As of December 31, 2017, there were no balances outstanding.

The Company also provides a \$23 million committed line of credit to TIAA Charitable Inc. This line has an expiration date of June 28, 2047. As of December 31, 2017, there was an outstanding balance of \$14 million.

Separate Account Guarantees: The Company provides mortality and expense guarantees to VA-1, for which it is compensated. The Company guarantees, at death, the total death benefit payable from the fixed and variable accounts will be at least a return of total premiums paid less any previous withdrawals. The Company also guarantees expense charges to VA-1 participants will never rise above the maximum amount stipulated in the contract.

The Company provides mortality, expense and liquidity guarantees to REA and is compensated for these guarantees. The Company guarantees once REA participants begin receiving lifetime annuity income benefits, monthly payments will never be reduced as a result of adverse mortality experience. The Company also guarantees expense charges to REA participants will never rise above the maximum amount stipulated in the contract. The Company provides REA with a liquidity guarantee to ensure it has funds available to meet participant transfer or cash withdrawal requests. If REA cannot fund participant requests, TIAA's general account will fund them by purchasing accumulation units. Under this agreement, TIAA guarantees that participants will be able to redeem their accumulation units at the accumulation unit value next determined after the transfer or withdrawal request is received in good order.

As of December 31, 2017, there are no outstanding liquidity units under the liquidity guarantee provided to REA by the Company.

The Company provides mortality and expense guarantees to VA-3 and is compensated for these guarantees. The Company guarantees once VA-3 participants begin receiving lifetime annuity income benefits, monthly payments will never be reduced as a result of adverse mortality experience. The Company also guarantees expense charges to VA-3 participants will never rise above the maximum amount stipulated in the contract.

Other Contingencies:

In the ordinary conduct of certain of its investment activities, the Company provides standard indemnities covering a variety of potential exposures. For instance, the Company provides indemnifications in connection with site access agreements relating to due diligence review for real estate acquisitions, and the Company provides indemnification to underwriters in connection with the issuance of securities by or on behalf of the Company or its subsidiaries. It is the Company management's opinion that the fair value of such indemnifications are negligible and do not materially affect the Company's financial position, results of operations or liquidity.

Other contingent liabilities arising from litigation and other matters over and above amounts already provided for in the financial statements or disclosed elsewhere in these notes are not considered material in relation to the Company's financial position or the results of its operations.

The Company receives and responds to subpoenas or other inquiries from state and federal regulators, including state insurance commissioners; state attorneys general and other state governmental authorities; the SEC; federal governmental authorities; and the Financial Industry Regulatory Authority ("FINRA"), seeking a broad range of information. The Company cooperates in connection with these inquiries and believes the ultimate liability that could result from litigation and proceedings would not have a material adverse effect on the Company's financial position.

Note 23- Subsequent Events

In preparing these financial statements, the Company has evaluated events and transactions for potential recognition or disclosure through March 14, 2018, the date the financial statements were available to be issued.

Effective January 1, 2018, the Company entered into Investment Management Agreements with Advisors and Nuveen Alternatives Advisors, LLC, wholly-owned subsidiaries of TIAA's wholly-owned subsidiary Nuveen, to manage, at a negotiated fee, investments held within the Company's General Account including investments owned by investment subsidiaries of the Company.

In association with the implementation of the Investment Management Agreements stated above, as TIAA acts as the advisor on behalf of TIAA-CREF Life, effective January 1, 2018, the Company amended and restated its Investment Management Agreement with TIAA-CREF Life.

Effective January 1, 2018, the Company entered into an Omnibus Service Agreement with its wholly-owned subsidiary Nuveen, pursuant to which Nuveen directly or through its subsidiaries agreed to provide services complementary to investment management to the Company at cost, inclusive of charges for overhead.

Simultaneous with the effectiveness of the Investment Management Agreements, the Company amended the General Service and Facilities Agreement pursuant to which Nuveen provides services to the Company to remove any investment management services from the aforementioned agreement.

Effective February 6, 2018, the Company entered into a Service Agreement with TIAA, FSB for TIAA, FSB to provide general services in support of the Company's and its subsidiaries' activities at cost inclusive of charges for overhead.