Teachers Insurance and Annuity Association of America

And Affiliates

Key Rating Drivers

Extremely Strong Capitalization: Fitch Ratings considers Teachers Insurance and Annuity Association of America's (TIAA) risk-adjusted statutory capitalization to be extremely strong and well within the range of peers rated 'AAA'. TIAA's reported total adjusted capital (TAC) as of Dec. 31, 2019 was $46.1 billion, a 4% increase from YE 2018. TIAA's RBC was 491% and its Prism capital model score was 'Extremely Strong' at YE 2019.

Increased Leverage: Financial leverage is at the high end of Fitch's tolerances for the 'AAA' rating following the issuance of $1.25 billion of surplus notes in May 2020. The new issue increased Dec. 31, 2019 financial leverage on a pro forma basis to 16.8% from 14.7% actual. Fitch expects the increase in leverage to be temporary and to decline back below 16%.

Coronavirus Pandemic: Fitch expects the coronavirus pandemic to pressure TIAA's earnings and capital, but financial performance and balance sheet fundamentals will remain in line with rating expectations. Expected losses are driven by interest rate and asset risk. Fitch's concerns over the near term include declining interest rates, credit losses, rating migration and elevated mortality. Longer-term concerns include the potential for a prolonged, steep macroeconomic downturn; changes in policyholder behavior; and low interest rates that persist.

Significant Financial Flexibility: Fitch believes that TIAA's very stable long-duration liability profile (approximately 29% of its liabilities are subject to policyholder discretionary withdrawal) and considerable room to lower crediting rates provide the company with significant financial flexibility during periods of disruption in the financial markets.

Rating Sensitivities

Pandemic Impact: The ratings remain sensitive to any material change in Fitch's rating case assumptions with respect to the coronavirus pandemic.

Regulatory or Ownerships Changes: A regulatory change that would have a negative impact on TIAA's core pension market or a change in TIAA's ownership structure could result in a downgrade.

Capital Strength: Failure for TIAA to achieve ongoing positive surplus growth over a multiyear period, a Fitch Prism score below 'Extremely Strong' or reported RBC below 400% could result in a downgrade.

Financial Leverage: A sustained increase in statutory financial leverage above 16% could result in wider notching between TIAA's Insurer Financial Strength (IFS) rating and the ratings of the surplus notes, which would result in a downgrade of the surplus notes. An increase in statutory financial leverage above 20% could result in a downgrade of all ratings and wider notching between TIAA's IFS rating and the ratings of the surplus notes.

Ratings

Teachers Insurance and Annuity Association of America	
Insurer Financial Strength	AAA
Long-Term IDR	AA+
Surplus Notes	AA
TIAA-CREF Life Insurance Company	
Insurer Financial Strength	AAA
Nuveen, LLC	
Long-Term IDR	AA–
Senior Unsecured Notes	AA+
Nuveen Finance, LLC	
Long-Term IDR	AA–
Senior Unsecured Notes	AA–

Outlook

Stable

Financial Data

Teachers Insurance and Annuity Association of America

($ Mil.)	12/31/18	12/31/19
Net Income	1,438	1,410
Net Operating Gain	2,094	1,741
TAC	44,328	46,144
RBC Ratio (%)	438	491

TAC – Total adjusted capital. Note: Reported on a statutory accounting basis.
Source: Fitch Ratings, Teachers Insurance and Annuity Association of America.

Applicable Criteria

Insurance Rating Criteria (August 2020)
Non-Bank Financial Institutions Rating Criteria (February 2020)

Related Research

U.S. Life Insurers' Investment Portfolios (Results of Fitch's YE 2019 Survey) (October 2020)

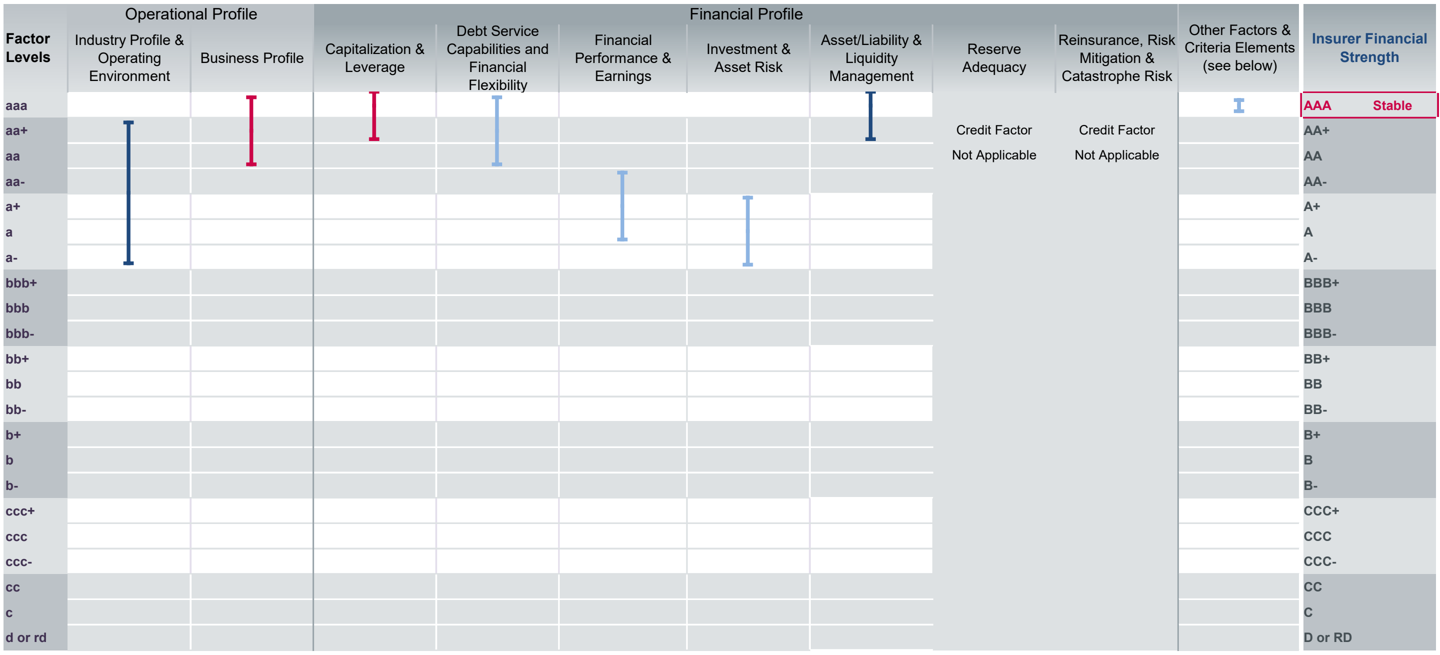
U.S. Life Insurers' Commercial Mortgage Update (Mortgage Loan Forbearance Activity Moderate, but Elevated Losses Expected) (September 2020)

Analysts

Donald Thorpe
+1 312 606-2353
donald.thorpe@fitchratings.com

Nelson Ma
+1 212 908-0273
nelson.ma@fitchratings.com

Key Credit Factors — Scoring Summary



Other Factors & Criteria Elements				
Provisional Insurer Financial Strength				**AAA**
Non-Insurance Attributes	Positive	**Neutral**	Negative	+0
Corporate Governance & Management	**Effective**	Some Weakness	Ineffective	+0
Ownership / Group Support	Positive	**Neutral**	Negative	+0
Transfer & Convertibility / Country Ceiling	Yes	**No**	AAA	+0
Insurer Financial Strength (IFS)			Final:	**AAA**
IFS Recovery Assumption	**Good**			-1
Issuer Default Rating (IDR)			Final:	**AA+**

Bar Chart Legend

Vertical Bars = Range of Rating Factor
Bar Colors = Relative Importance
Higher Influence
Moderate Influence
Lower Influence
Bar Arrows = Rating Factor Outlook
⇧ Positive ⇩ Negative
⇳ Evolving ▫ Stable

Latest Developments

- In May 2020, TIAA issued $1.25 billion of its 3.3% surplus notes due May 2050. Financial leverage increased on a pro forma basis to 16.8% from an actual 14.7% on Dec. 31, 2019.

Industry Profile and Operating Environment (IPOE)

Click here for a link to a report that summarizes the main factors driving the above IPOE score.

Business Profile

Dominant Position in Higher Education Market

Fitch ranks TIAA's business profile as "most favorable" compared with other North American life insurance companies due to its most favorable competitive positioning across core markets and most favorable operating scale offset by "moderate" product diversification, which emphasizes institutional retirement products. Given this ranking, Fitch assesses TIAA's business profile as 'aa+' under its credit factor scoring guidelines.

TIAA's primary business is providing individually owned retirement annuities to fund defined contribution pension plans at participating institutions. Its core market is the 403(b) market, particularly institutions of higher education, where it is the dominant player and has significant scale. TIAA is also a leading recordkeeper of defined contribution plans. Approximately 99% of TIAA's general account policy and contract reserves are attributable to pension and other retirement annuities. As of YE 2019, total consolidated assets (including assets under management and assets under administration) within the TIAA organization were approximately $1.3 trillion.

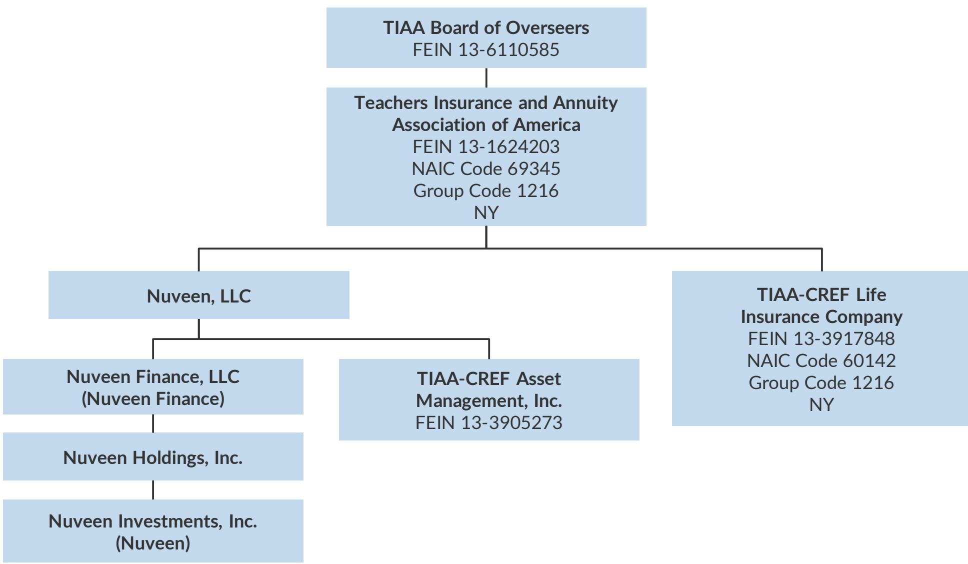
TIAA has very stable, long-duration liabilities — primarily general account policy and contract reserves that are not subject to discretionary withdrawal at the option of the policyholder. Fitch considers TIAA's risk appetite to be much lower than the life sector as a whole.

Although TIAA offers some life insurance products to round out its product offerings, the company's core pension segment still accounts for a vast majority of the overall operating earnings. This concentration exposes the company to potential regulatory, tax or other changes that could negatively affect this market in the future. Fitch believes the company is closely monitoring and managing this risk.

Ownership

TIAA's ownership structure is positive from a rating perspective. Fitch believes that TIAA's nonprofit charter generally allowed management to hold more conservative levels of capital and pursue a more conservative operating strategy. During the 2008–2009 financial crisis, TIAA and other strongly capitalized mutual companies clearly benefited from having stronger capital buffers than many publicly owned peers that were more focused on growth and return targets.

Simplified Organizational Structure



Source: S&P Global Market Intelligence.

Capitalization and Leverage

Extremely Strong Balance Sheet

TIAA has extremely strong capitalization. Financial leverage is somewhat elevated due to recent acquisitions. TIAA's exposure to equity market volatility is minimal.

Fitch considers TIAA's statutory capital position to be extremely strong and well in excess of 'AAA' expectations for RBC and operating leverage. TIAA also has a Prism capital model score of 'Extremely Strong'. The company reported a 4% increase in TAC for 2019, primarily due to retained earnings and net investment gains. This follows a 4% gain in 2018. TIAA's reported RBC ratio is somewhat understated as the New York regulator-based surplus calculation reflects more conservative reserving practices relative to an NAIC basis. Therefore, Fitch also calculates the RBC ratio on an equivalent NAIC basis, which would be 535% for YE 2019.

Fitch believes the quality of TIAA's statutory capital is very high based on the company's limited use of reinsurance and conservative reserving practices. As noted earlier, TIAA's reserves are currently higher than NAIC reserving requirements. Statutory financial leverage, calculated using surplus on an NAIC basis, is 14.7%. Fitch's statutory financial leverage calculation includes TIAA surplus notes; Nuveen Finance, LLC senior unsecured notes; and subordinated debt at TIAA Bank as leverage, compared with TAC on an NAIC statutory basis.

Financial leverage increased to 16.8% on a pro forma basis following TIAA's issuance of $1.25 billion of surplus notes in May 2020. While Fitch believes it was prudent to raise capital in light of uncertainty surrounding the coronavirus pandemic, the increase brings TIAA's financial leverage to the upper boundary of Fitch's tolerance at the current rating level.

TIAA's total financing and commitments ratio, which also includes TIAA's securities lending program, remained low at 0.15x as of Dec. 31, 2019 and well within rating expectations.

TIAA, in conjunction with College Retirement Equities Fund (CREF), wrote the first variable annuity (VA) in 1952. However, unlike much of the industry, the company stuck to the original premise of a VA, which passed the equity market risk to the contract holder. TIAA does not guarantee the performance of CREF funds, and its VA contracts do not contain any living benefit guarantees. Therefore, Fitch views TIAA as having minimal exposure to the equity markets through VA guarantees, which created significant volatility in the earnings and capital of many VA writers.

Fitch Expectations

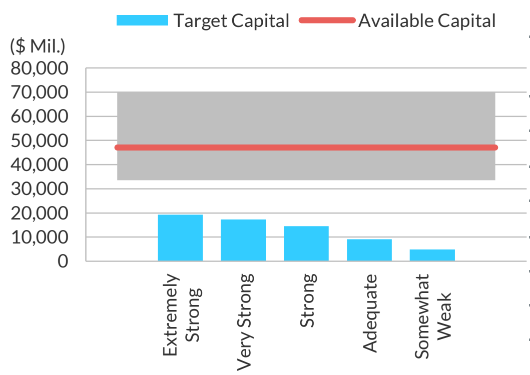
- Financial leverage is expected to gradually decline over the next 12–24 months absent material losses as a result of the coronavirus pandemic.

Financial Highlights

($ Mil.)	2018	2019
Total Adjusted Capital	44,328	46,144
RBC (%)	438	491
Operating Leverage (x)	5.2	5.1
Asset Leverage (x)	7.1	7.1
Fitch Statutory Financial Leverage (%)	15.3	14.7

Note: Reported on a statutory basis.
Source: Fitch Ratings, Teachers Insurance and Annuity Association of America.

2019 Prism Score — Teachers Insurance and Annuity Association of America



(%)	2019
Prism Score	Extremely Strong
AC/TC at Prism Score	245
Target Capital Contributors	
Life Insurance	3
Annuity	99
Accident and Health	—
Portfolio Scaling Adjustment	(8)
Operational Risk	9
Diversification Benefit	(3)

AC – Available capital. TC – Target capital. Note: Shaded area represents the high and low of AC due primarily to the value of affiliated life subsidiary, unrealized bond gains/(losses) and surplus notes.
Source: Fitch Ratings.

Debt Service Capabilities and Financial Flexibility

Very Strong Debt-Servicing Capabilities and Financial Flexibility

Statutory earnings coverage is strong. TIAA demonstrated its ability to access the capital markets by selling surplus notes from the life insurer and senior unsecured notes from its Nuveen subsidiaries (consisting of Nuveen, LLC and Nuveen Finance). The ability to lower crediting rate provides significant financial flexibility.

Statutory earnings-based interest coverage provides strong coverage of total interest expense, which is comprised of interest expense from the senior unsecured notes of Nuveen, LLC and Nuveen Finance, various securities issued by TIAA Bank and the TIAA surplus notes. TIAA's statutory earnings interest coverage is comparable with other highly rated mutual peers. Fitch expects statutory interest coverage to remain in the 5.5x–7.0x range in the medium term given an incremental increase in interest expense from the surplus notes issue and improved operating earnings over the longer term. Fitch's view of TIAA's debt-servicing capabilities also considers the company's extremely strong capital position and liquidity of the entire general account.

TIAA has demonstrated access to capital markets. Most recently, TIAA raised $1.25 billion by issuing surplus notes in May 2020. This follows issuance of $1.0 billion of senior guaranteed debt in Nuveen in 2018, $2.0 billion in proceeds from new TIAA surplus notes in May 2017, $4.0 billion previously issued through new surplus notes from TIAA, and senior unsecured debt in Nuveen Finance in 2014. At their current financial leverage, TIAA is at the limit of Fitch's tolerance for their rating category.

Fitch views TIAA as having significant financial flexibility through its ability to lower its crediting rate to increase earnings and capital when needed. Given the 3% minimum guaranteed rate on much of the in-force block, this flexibility will be constrained the longer interest rates stay low. Fitch does not view this as a near-term issue. The group's strong operating cash flows and stable liability structure further enhance its flexibility.

Fitch Expectations

- Interest expense will incrementally increase as a result of the surplus notes offering.
- Interest coverage is expected to remain between 5.5x and 7.0x in the medium term.

Financial Highlights

($ Mil.)	2018	2019
Adjusted Interest Expense	357	355
Statutory Interest Earnings Coverage	7	6

Note: Reported on a statutory basis.
Source: Fitch Ratings, Teachers Insurance and Annuity Association of America.

Debt Maturities

($ Mil., as of Dec. 31, 2019)	
2020	0
2021	0
2022 and Later	7,407
Total	**7,407**

Source: Fitch Ratings, Teachers Insurance and Annuity Association of America.

Financial Performance and Earnings

Good Operating Profitability

TIAA's operating profitability remains within expectations. Earnings from pensions are a key driver of profitability. TIAA is exposed to continued low interest rates, but the risk is manageable in the near term. Fitch considers TIAA's earnings to be moderate on an absolute basis, but favorable on a risk-adjusted basis.

TIAA's ability to retain and grow its core pension liabilities are key drivers of profitability since interest margins in the pension segment account for over 70% of operating earnings. That concentration is expected to continue over the medium term, although earnings from outside the core pension segment are expected to grow over time with execution of strategies in asset management and banking. Client net flows in the core pension segment for 2019 were unfavorable compared with 2018. However, net flows at Nuveen were better than 2018 and expectation. Overall net flows were favorable to 2018 and expectation.

TIAA's investment yield declined slightly in 2019 to 4.63% from 4.84% in 2018. TIAA benefits from earnings flexibility in its ability to lower crediting rates to support earnings and capital should the need arise.

Fitch Expectations

- Interest margins in the pension segment will continue to drive TIAA earnings in the intermediate term.
- Growth is expected in earnings contributions from asset management over time.

Financial Highlights

($ Mil.)	2018	2019
Pretax Net Gain from Operations	2,074	1,762
Net Income	1,438	1,410
Pretax ROA (%)	0.7	0.6
After-Tax ROC (%)	4.8	4.6

ROC – Return on capital. Note: Reported on a statutory basis.
Source: Fitch Ratings, Teachers Insurance and Annuity Association of America.

Investment and Asset Risk

Good Investment Performance

TIAA's investment portfolio continues to perform within expectations. The company's risky asset exposure is in line with peers. Gains from private equity remain strong. The company has shifted its commercial real estate exposure to commercial mortgage loans from commercial mortgage-backed securities (CMBS).

TIAA's investment portfolio continues to perform within expectations. Total impairments declined in 2019.

TIAA's risky asset ratio (measured by below-investment-grade bonds, common stocks, troubled real estate and Schedule BA invested assets over TAC) improved to 110% in 2019 from 119% in 2018. The proportion of below-investment-grade bonds declined relative to 2018. However, if the risky asset ratio is calculated, excluding the equity ownership interests of Nuveen, LLC, TIAA's risky asset ratio falls to approximately 98%. TIAA's risky asset ratio, calculated on this basis, is comparable with other highly rated mutual peers.

Investment income related to private equity and limited partnerships was a significant boost to TIAA's net income over the last several years, providing an additional source for strong crediting rates for policyholders. Net investment yields on the portfolio continued to perform relatively well in 2019, remaining at just under 5% as strong private equity performance bolstered investment income despite continued low interest rates. Alternative invested assets (Schedule BA) accounted for approximately 8% of invested assets at Dec. 31, 2019 (excludes equity ownership of Nuveen, LLC).

Total commercial real estate (CRE) exposure, including whole loans, CMBS and CRE collateralized debt obligations, as a percentage of invested assets, steadily increased over the last five years, and was primarily driven by an increase in commercial mortgage loan exposure. The increase in commercial mortgage loan exposure as of percentage of invested assets over the last four years is consistent with that other life insurers as companies seek to trade liquidity for spread to combat low interest rates.

Fitch Expectations

- Elevated impairments are expected over the next 12–18 months as a result of the economic stress caused by the coronavirus pandemic.

Financial Highlights

	2018	2019
Cash and Invested Assets ($ Mil.)	267,632	275,159
Below-Investment-Grade Bonds/TAC (%)	43	34
Risky Assets Ratio (%)	119	110
Investment Yield (%)	4.8	4.6

TAC – Total adjusted capital. Note: Reported on a statutory basis.
Source: Fitch Ratings, Teachers Insurance and Annuity Association of America.

Commercial Real Estate Exposure

($ Bil.)	2018	2019
CRE CDO	0.1	0.0
Commercial Mortgage Loans	28.8	31.5
CMBS	10.4	10.1
Total CRE-Related Investments	39.3	41.6
% of Total Invested Assets	15	16

CRE – Commercial real estate. CDO – Collateralized debt obligation. CMBS – Commercial mortgage-backed securities. Note: Reported on a statutory basis.
Source: Fitch Ratings, Teachers Insurance and Annuity Association of America.

Asset/Liability and Liquidity Management

Strong Liquidity Profile Offsets Asset/Liability Management Risk

TIAA's liabilities are relatively stable and long duration. Disintermediation risk is limited. This allows TIAA to invest in less liquid assets that provide strong operating cash flows.

Fitch views TIAA as having a very strong liquidity profile with very stable, long-duration liabilities. Approximately 71% of TIAA's general account policy and contract reserves were not subject to discretionary withdrawal at the option of the policyholder as of YE 2019. Most of the remaining 29% of cashable account values are held by individual TIAA policyholders, which would reduce the likelihood that substantial amounts are withdrawn all at once as policyholders would have to independently do so at the same time. Additionally, tax implications for the policyholders act as a disincentive for withdrawals as most of the premiums are remitted on a before-tax basis. Therefore, withdrawals of the cashable values would result in the taxation of the entire accumulation amount. As a result, TIAA experienced relatively stable and modest surrender activity.

TIAA generally does not offer lump sum payouts on its core pension annuities. TIAA's core pension products are designed to convert to payout annuities, which pay out over a lifetime when the participant retires. A transferability feature was introduced in 1991 to provide more flexibility to the contract holder, but even that requires payouts over a 10-year period to protect TIAA from large-scale withdrawals.

Given TIAA's core pension business, most of the company's premium cash flows come from defined contribution retirement systems where the contributions are predominantly a fixed

Financial Highlights

(%)	2018	2019
Public Bonds/Total Bonds	68.3	66.6
Liquidity Ratio	170	163
Operating Cash Flow Coverage (x)	1.3	1.2
Total Adjusted Liabilities and Deposits ($ Mil.)	272,614	282,975

Note: Reported on a statutory basis.
Source: Fitch Ratings, Teachers Insurance and Annuity Association of America, S&P Global Market Intelligence.

percentage of participant's salaries and are remitted on a monthly or bimonthly basis. Therefore, TIAA benefits from a steady predictable cash flow. Its operating cash flow is strong, with approximately $16 billion annually of net premium income and about $12 billion of net investment income as of 2019. TIAA also maintains significant levels of cash and liquid assets, with a large, publicly traded, investment-grade bond portfolio.

Fitch views TIAA's investments in less liquid assets, such as structured finance, private equity and commercial mortgage loans, as appropriate given its long-duration liability structure and low level of disintermediation risk. TIAA also has one of the highest liquidity ratios in the Fitch universe based on liquid assets in relation to demand liabilities.

Fitch Expectations

- TIAA is expected to maintain below-average exposure to disintermediation risk and strong net operating cash flows over the medium term.

Key Non-Insurance Operations/Exposure

Assets Under Management and Administration Continue to Grow

Fitch expects asset management-based fees to continue to grow over the long term, despite short-term fluctuations in market values. However, the pension business will remain the primary earnings driver. Increasing third-party assets under management (AUM) and assets under administration (AUA) are key elements of TIAA's asset growth strategy.

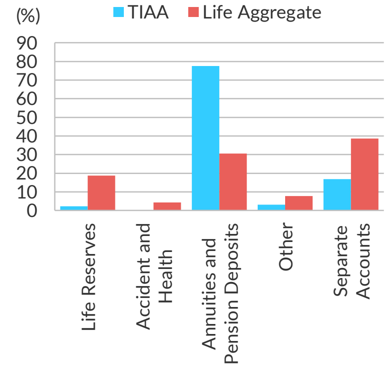
TIAA's core pension business still continues to be the primary driver of earnings and is a reliable long-term source of earnings stability for the company. Nuveen diversifies TIAA's earnings and increases fee income (revenues earned as a percentage of AUM) for TIAA. However, Nuveen also increases the potential volatility of the asset management earnings stream as the fee income may fluctuate depending on market performance and the asset manager's ability to attract and retain AUM. TIAA's AUM are diversified by product type, which includes real estate, mutual fund and retail accounts, structured/closed-end fund products and institutional. AUM are also diversified by strategy, including credit-based strategies, equity-based strategies and alternatives.

Nuveen is a well-established brand name in the asset management industry, with more than 115 years of history. Third-party AUM, which significantly increased from the acquisition of Nuveen and the formation of the TH Real Estate joint venture in 2014, currently comprises roughly one-third of total AUM for all of TIAA's asset management entities. The Nuveen acquisition also strengthened TIAA's distributional capabilities, as Nuveen distributed its products through retail and institutional channels, including wirehouses, independent broker/dealers and institutional relationships. The company is targeting to increase third-party AUM over the near term.

Fitch Expectations

- Total AUM and AUA are expected to continue to grow over the long term as total client net inflows stay strong. However, market disruption resulting from the coronavirus pandemic may cause short-term volatility.

Adjusted Liabilites and Separate Accounts
(Year End 2019)



Source: Fitch Ratings, S&P Global Market Intelligence.

Financial Highlights

($ Bil.)	2018	2019
Total AUM/AUA[a]	1,116	1,286
Total AUM	970	1,098
Third-Party AUM as a % of Total AUM (%)	33	34

[a] Includes TIAA, separate account and third-party assets. AUM – Assets under management.
AUA – Assets under administration.
Source: Fitch Ratings, Teachers Insurance and Annuity Association of America.

Appendix A: Peer Analysis

TIAA Compares Well with Other 'AAA' Peers

TIAA is unique among its mutual peers in that its business is predominantly pension annuities rather than participating life insurance. It is within range of peers with respect to capitalization and has significant financial flexibility through its ability to lower its crediting rate to increase earnings and capital if required. TIAA's strength and financial flexibility comes from the company's very stable liability profile and very strong cash flows. Fitch views the company's investment risk as measured by the risky assets-to-TAC ratio as within range of peers.

Peer Comparison

(%, as of Dec. 31, 2019)	IFS Rating	RBC Ratio	TAC ($ Mil.)	Assets / TAC	Operating Leverage (x)	Risky Assets/ TAC (x)	FLR	ROA	Operating Return on TAC
TIAA	AAA	491	46,144	7	5	110	15	0.6	3.9
Northwestern Mutual	AAA	531	33,417	9	7	118	11	0.1	1.8
New York Life	AAA	507	27,423	13	10	91	11	0.4	4.4
Guardian Life	AA+	527	9,254	9	7	49	13	1.0	9.6
MassMutual	AA+	440	24,515	11	8	83	9	0.2	2.6

IFS – Insurer Financial Strength. TAC – Total adjusted capital. FLR – Financial leverage ratio. Note: Reported on a U.S. Statutory basis.
Source: Fitch Ratings, S&P Global Market Intelligence.

Appendix B: Other Ratings Considerations

Below is a summary of additional ratings considerations that are part of Fitch's ratings criteria.

Group IFS Rating Approach

TIAA is considered the lead operating entity of the group. TIAA's wholly owned subsidiary, TIAA-CREF Life Insurance Co., is viewed as Core and has a capital support agreement from TIAA.

Nuveen Finance is a subsidiary holding company of TIAA created to hold its investment in Nuveen Investments, Inc. Fitch views Nuveen Finance as a strategically Important subsidiary of TIAA. A subsidiary viewed as Important will typically have ratings one notch and, in some cases, two notches lower than the parent. In the case of Nuveen Finance, a two-notch differential was used as the additional notch differentiates the ratings of the senior unsecured notes of Nuveen Finance from that of the surplus notes of TIAA, which would have a higher priority.

Fitch's view of Nuveen Finance's strategic importance considers TIAA's full ownership and potential synergies providing products and services in markets that are strategically important to TIAA, including the mutual fund, asset management and retirement services markets.

Notching

For notching purposes for the operating company surplus notes, the regulatory environment of U.S. is assessed by Fitch as being Effective and classified as following a Ring-Fencing approach.

Notching Summary

IFS Ratings
A baseline recovery assumption of Good applies to the IFS rating, and standard notching was used from the IFS "anchor" rating to the implied operating company IDR.
Operating Company Hybrids
For the surplus notes issued by TIAA, a baseline recovery assumption of Below Average and a nonperformance risk assessment of Minimal were used. Notching of one notch was applied relative to the operating company IDR, which was based on Below Average for recovery and Minimal for nonperformance risk.
IDR of Nuveen Finance, LLC
Nuveen Finance's IDR reflects two notches from TIAA's IDR based on Fitch's view that Nuveen Finance is a Strategically Important subsidiary of TIAA per the *Non-Bank Financial Institutions Rating Criteria*, as stated above.
Senior Unsecured Notes of Nuveen Finance, LLC
As per the *Non-Bank Financial Institutions Rating Criteria*, the rating of the senior unsecured notes of Nuveen Finance are in line with the IDR to reflect the view that a default on the senior unsecured obligations, the only class of debt at Nuveen Finance, would be treated as a default of the entity, with average recovery prospects.
Senior Guaranteed Notes of Nuveen, LLC
TIAA's guarantee ranks below its obligations to policy holders and is senior to its surplus notes (AA). Therefore, Fitch has set the rating of Nuveen Finance's notes equal to TIAA's IDR, with average recovery prospects.

IFS – Insurer Financial Strength. IDR – Issuer Default Rating.

Short-Term Ratings

Not applicable

Hybrid — Equity/Debt Treatment

Hybrids Treatment

Hybrid	Amount ($ Mil.)	CAR Fitch (%)	CAR Regulatory Override (%)	FLR Debt (%)
Teachers Insurance and Annuity Association of America				
6.850% Surplus Notes due 2039	1,050	0	100	100
4.900% Surplus Notes due 2044	1,650	0	100	100
4.270% Surplus Notes due 2047	2,000	0	100	100
3.300% Surplus Notes due 2050	1,250	0	100	100
4.375% Surplus Notes due 2054	350	0	100	100

CAR – Capitalization ratio: FLR – Financial leverage ratio. Note: CAR % shows portion of hybrid value included as available capital, both before (Fitch %) and the regulatory override. FLR % shows portion of hybrid value included as debt in numerator of leverage ratio.
Source: Fitch Ratings.

Corporate Governance and Management

TIAA was established in 1918 as a legal reserve life insurance company under the insurance laws of the State of New York. Under its charter, TIAA's primary purpose is to aid and strengthen nonprofit educational and research organizations, governmental entities and other nonprofit institutions by providing retirement and insurance benefits for employees and their families. TIAA may engage in any business permitted under New York Insurance Law for a domestic stock life insurance company provided such business supports its primary purpose.

Corporate governance and management are deemed effective and neutral to the rating.

Transfer and Convertibility Risk (Country Ceiling)

None.

Criteria Variations

None.

Appendix C: Environmental, Social and Governance Considerations

FitchRatings **Teachers Insurance and Annuity Association of America**

Insurance Ratings Navigator
Life Insurance (US)

Credit-Relevant ESG Derivation

Teachers Insurance and Annuity Association of America has 6 ESG potential rating drivers

- Teachers Insurance and Annuity Association of America has exposure to compliance risk; treating customers fairly; pricing transparency; privacy/data security; legal/regulatory fines; exposure to own cyber risk but this has very low impact on the rating.
- Teachers Insurance and Annuity Association of America has exposure to social responsibility and its effect on brand strength; increased vulnerability due to credit concentrations but this has very low impact on the rating.
- Governance is minimally relevant to the rating and is not currently a driver.

			Overall ESG Scale
key driver	0	issues	5
driver	0	issues	4
potential driver	6	issues	3
not a rating driver	2	issues	2
	6	issues	1

Environmental (E)

General Issues	E Score	Sector-Specific Issues	Reference	E Scale
GHG Emissions & Air Quality	1	n.a.	n.a.	5
Energy Management	1	n.a.	n.a.	4
Water & Wastewater Management	1	n.a.	n.a.	3
Waste & Hazardous Materials Management; Ecological Impacts	1	n.a.	n.a.	2
Exposure to Environmental Impacts	2	Impact of extreme weather events/natural catastrophes on operations or asset quality; credit concentrations	Financial Performance & Earnings; Investment & Asset Risk	1

Social (S)

General Issues	S Score	Sector-Specific Issues	Reference	S Scale
Human Rights, Community Relations, Access & Affordability	1	n.a.	n.a.	5
Customer Welfare - Fair Messaging, Privacy & Data Security	3	Compliance risk; treating customers fairly; pricing transparency; privacy/data security; legal/regulatory fines; exposure to own cyber risk	Industry Profile & Operating Environment; Business Profile	4
Labor Relations & Practices	2	Impact of labor negotiations, including board/employee compensation and composition	Corporate Governance & Management	3
Employee Wellbeing	1	n.a.	n.a.	2
Exposure to Social Impacts	3	Social responsibility and its effect on brand strength; increased vulnerability due to credit concentrations	Business Profile; Investment & Asset Risk; Financial Performance & Earnings; Reinsurance, Risk Mitigation & Catastrophe Risk	1

Governance (G)

General Issues	G Score	Sector-Specific Issues	Reference	G Scale
Management Strategy	3	Operational implementation of strategy	Corporate Governance & Management; Business Profile	5
Governance Structure	3	Board independence and effectiveness; ownership concentration; protection of creditor/stakeholder rights; legal /compliance risks; business continuity; key person risk; related party transactions	Corporate Governance & Management	4
Group Structure	3	Organizational structure; appropriateness relative to business model; opacity; intra-group dynamics; ownership	Corporate Governance & Management; Ownership	3
Financial Transparency	3	Quality and timing of financial reporting and auditing processes	Corporate Governance & Management	2
				1

How to Read This Page
ESG scores range from 1 to 5 based on a 15-level color gradation. Red (5) is most relevant and green (1) is least relevant.

The Environmental (E), Social (S) and Governance (G) tables break out the individual components of the scale. The right-hand box shows the aggregate E, S, or G score. General Issues are relevant across all markets with Sector-Specific Issues unique to a particular industry group. Scores are assigned to each sector-specific issue. These scores signify the credit-relevance of the sector-specific issues to the issuing entity's overall credit rating. The Reference box highlights the factor(s) within which the corresponding ESG issues are captured in Fitch's credit analysis.

The Credit-Relevant ESG Derivation table shows the overall ESG score. This score signifies the credit relevance of combined E, S and G issues to the entity's credit rating. The three columns to the left of the overall ESG score summarize the issuing entity's sub-component ESG scores. The box on the far left identifies some of the main ESG issues that are drivers or potential drivers of the issuing entity's credit rating (corresponding with scores of 3, 4 or 5) and provides a brief explanation for the score.

Classification of ESG issues has been developed from Fitch's sector ratings criteria. The General Issues and Sector-Specific Issues draw on the classification standards published by the United Nations Priniciples for Responsible Investing (PRI) and the Sustainability Accounting Standards Board(SASB).

Sector references in the scale definitions below refer to Sector as displayed in the Sector Details box on page 1 of the navigator.

CREDIT-RELEVANT ESG SCALE
How relevant are E, S and G issues to the overall credit rating?

5	Highly relevant, a key rating driver that has a significant impact on the rating on an individual basis. Equivalent to "higher" relative importance within Navigator.
4	Relevant to rating, not a key rating driver but has an impact on the rating in combination with other factors. Equivalent to "moderate" relative importance within Navigator.
3	Minimally relevant to rating, either very low impact or actively managed in a way that results in no impact on the entity rating. Equivalent to "lower" relative importance within Navigator.
2	Irrelevant to the entity rating but relevant to the sector.
1	Irrelevant to the entity rating and irrelevant to the sector.

ESG Considerations

Unless otherwise disclosed in this section, the highest level of ESG credit relevance is a score of '3'. ESG issues are credit neutral or have only a minimal credit impact on the entity, either due to their nature or the way in which they are being managed by the entity. For more information on Fitch's ESG Relevance Scores, visit www.fitchratings.com/esg.

The ratings above were solicited and assigned or maintained at the request of the rated entity/issuer or a related third party. Any exceptions follow below.