

CREDIT OPINION

9 February 2017

Update

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RATINGS
Teachers Ins. and Annuity Assoc. of America

Domicile	New York, New York, United States
Long Term Rating	Aa1
Type	Insurance Financial Strength
Outlook	Stable

Please see the ratings section at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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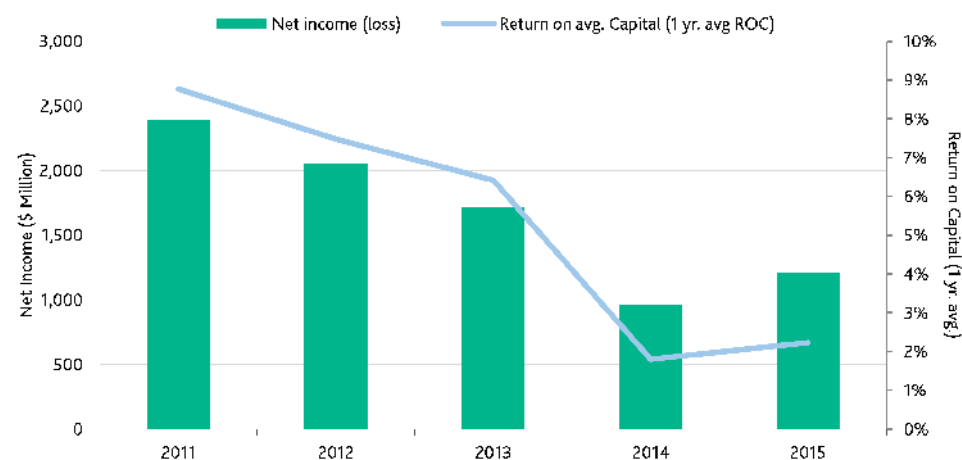
Teachers Ins. and Annuity Assoc. of America

Semi-Annual Update

Summary Rating Rationale

Moody's Aa1 (stable outlook) insurance financial strength (IFS) rating of Teachers Insurance and Annuity Association of America (TIAA), and its wholly-owned subsidiary TIAA-CREF Life Insurance Company (TIAA-CREF Life) reflect the company's dominant position in the higher-education pension market, its outstanding capital base, its expense advantages, and its uniquely stable liability structure. These strengths are somewhat offset by increased competition from other financial service providers in the higher education pension market, as well as the potential for investment losses and earnings volatility in a stress scenario, especially in commercial real estate related investments.

Exhibit 1

Net Income and Return on Capital (1 yr. avg.)


Source: Moody's Investors Service and Company Filings

TIAA-CREF Life's Aa1 IFS rating is based upon TIAA's explicit support for TIAA-CREF Life and on TIAA-CREF Life's strategic importance to the combined TIAA-CREF organization. TIAA's support for TIAA-CREF Life includes a commitment by TIAA regarding TIAA-CREF Life's minimum capital and surplus, liquidity, limitation on transference of policies to other insurers, and the maintenance of ownership.

TIAA itself offers no equity based products nor has substantial equity investments. However, College Retirement Equities Fund (CREF), TIAA's affiliate, offers equity oriented investments to TIAA-CREF plan participants. While TIAA itself has no direct exposure to CREF's financial

performance, since the two organizations have an expense sharing arrangement, a decline in equity markets means that TIAA will be called upon to absorb an increased proportion of the combined organization's expenses, placing pressure on TIAA's participant crediting rates.

In 2014, TIAA acquired Nuveen Investments (unrated). Although asset management is a complementary business, it is of lower credit quality than the pension business, and because the levered acquisition of Nuveen is outside of the core higher-education pension business of TIAA, it weakened the overall credit profile of TIAA. That said, we expect TIAA to retain a strong focus on policyholders/creditors and we expect it will continue to be able to protect its balance sheet with the ability to cut substantial policyholder dividends as needed in stress financial scenarios.

TIAA Asset Management Finance Company, LLC, recently rebranded as Nuveen Finance, LLC, (Nuveen Finance, Baa2 LT Issuer rating) was established in connection with the Nuveen acquisition and holds 100% of the equity interests in Nuveen. Nuveen Finance does not have any significant assets, operations, revenues or cash flows other than those related to Nuveen. Its Baa2 senior unsecured debt rating incorporates two notches of ratings uplift from Nuveen's standalone credit profile to reflect implied financial support from TIAA.

On 8 August 2016, TIAA announced it had reached an agreement to acquire EverBank Financial Corp (EverBank, unrated) for approximately \$2.5 billion. The affirmation of TIAA's ratings following the transaction was driven by the modest size of the announced acquisition and its strategic fit in complementing TIAA's core 403(b) pension business. The merger of EverBank into TIAA's existing banking operations will significantly expand the company's banking and lending products and strengthen its retail distribution. However, the acquisition is credit negative largely because EverBank has a much weaker credit profile than TIAA which results from its modest competitive position and rapid expansion into new business lines. We anticipate that the acquisition will close within the next few months.

Credit Strengths

TIAA's credit strengths include:

- » Dominant market presence in education and research institution market;
- » Unique liability structure - approximately 75% of TIAA's liabilities are not subject to discretionary withdrawal;
- » Outstanding capitalization;
- » Most liabilities pass actual investment experience through to policyholders.

Credit Challenges

TIAA's credit challenges include:

- » An earnings profile with modest profitability and high volatility;
- » Slow growth of the company's core defined contribution pension market and increasing competition at employee participant level at sponsoring institutions;
- » Significant exposure to alternative investments.

Rating Outlook

The outlook in the Aa1 rating of TIAA is stable.

What to Watch for:

- » Performance of Nuveen and EverBank;
- » Competition in the company's core market, as well as the company's ability to expand into other markets;

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- » Regulatory developments that could impact the retirement services market (e.g., DOL Fiduciary standards).

Factors that Could Lead to an Upgrade

Given recent acquisitions have been outside of TIAA's core pension business, the company is not likely to be upgraded to Aaa. That said, the following could cause the overall credit profile of TIAA to improve:

- » Successful expansion in the company's core pension market and other related market segments such as municipalities and health care;
- » Improved asset quality as measured by Moody's stress losses; or
- » Measured growth in the asset management business.

Factors that Could Lead to a Downgrade

The following could cause downward pressure on TIAA's ratings:

- » NAIC company action level risked-based capital (RBC) ratio declining below 400% for more than a short time period or a reduction in capital of more than 10% over a 12 month period;
- » Adjusted financial leverage of 20%;
- » Earnings coverage consistently below mid-single digits; or
- » A meaningful acquisition.

Key Indicators

Exhibit 2

Key indicators

Teachers Ins. and Annuity Assoc. of America ^{[1][2]}	2015	2014	2013	2012	2011
As Reported (U.S. Dollar Millions)					
Total Assets	280,501	272,073	258,109	242,281	229,783
Total Shareholders' Equity	34,731	33,911	30,779	29,309	27,131
Net income (loss) attributable to common shareholders'	1,214	967	1,722	2,060	2,388
Total Revenue	27,599	26,909	27,953	24,858	25,205
Moody's Adjusted Ratios					
High Risk Assets % Shareholders' Equity	118.3%	112.3%	100.1%	108.5%	116.9%
Goodwill & Intangibles % Shareholders' Equity	0.0%	0.0%	0.0%	0.0%	0.0%
Shareholders' Equity % Total Assets	11.9%	12.5%	12.8%	12.2%	11.5%
Return on avg. Capital (1 yr. avg ROC)	2.2%	1.8%	6.4%	7.5%	8.8%
Sharpe Ratio of ROC (5 yr. avg)	169.5%	236.4%	109.7%	NA	NA
Financial Leverage	12.5%	12.3%	4.7%	5.3%	8.1%
Total Leverage	14.8%	14.6%	6.0%	8.0%	13.6%
Earnings Coverage (1 yr.)	3.5x	3.7x	16.9x	15.3x	12.0x
Cash Flow Coverage (1 yr.)	NA	NA	NA	NA	NA

[1] Information based on SAP financial statements as of Fiscal YE December 31

[2] Certain items may have been relabeled and/or reclassified for global consistency

Source: Moody's Investors Service and Company Filings

Notching Considerations

The notching between TIAA's IFS rating and its issuer and surplus notes ratings is consistent with Moody's typical notching practice for US insurance companies. The issuer rating (which applies to senior unsecured financial counterparty obligations and contracts) is one notch below the IFS rating and the surplus note rating is two notches below the IFS rating.

Detailed Rating Considerations

Moody's rates TIAA Aa1 for insurance financial strength, which is the same as the rating indicated by the adjusted insurance financial strength rating scorecard.

INSURANCE FINANCIAL STRENGTH RATING

The key factors currently influencing the rating and outlook are:

MARKET POSITION AND BRAND: Aaa - DOMINANT POSITION AND RESPECTED BRAND IN RETIREMENT SAVINGS FOR THE HIGHER EDUCATION AND NOT FOR PROFIT RETIREMENT MARKETS

TIAA is one of the top five life groups in the US when ranked by assets, but it remains a fairly small portion of the overall industry, since it focuses its efforts on a very specialized market--the retirement savings of educators and non-profit research professionals. TIAA is by far the dominant provider of employer-sponsored savings plans in the higher education market (colleges and universities). TIAA's market share in this segment is in excess of 50%. Because of this intense focus and dominance in this segment, we have adjusted the score for this factor upward to Aaa from A.

The combination with Nuveen, a multi-boutique asset manager, and EverBank, increased the weight of the company outside the higher-education pension market. Nuveen's well-diversified base of managed assets stood at \$244.7 billion as of 30 September 2016.

DISTRIBUTION: Aa - SALARIED DISTRIBUTION FORCE AND STRONG RELATIONSHIPS WITH SPONSORS

TIAA exclusively markets its primary products directly to plan participants through their employers via full-time TIAA staff. TIAA products are often the only retirement savings vehicle offered by the employer. The acquisition of Nuveen and EverBank help to expand TIAA's reach into retail distribution channels, adding diversification.

On 3 February 2017, President Trump signed a memorandum asking the Secretary of Labor to review the DOL fiduciary rule, whose first phase was set to be implemented on April 10. A rescinding of the rule, if it happens, would be credit positive for life insurers, eliminating, at a minimum, exposure to litigation risk and on-going compliance costs. While the DOL fiduciary rule does not directly impact 403(b) plans, rollover IRAs from these plans would be impacted. While TIAA would be subject to increased compliance costs due to the fiduciary rule, we don't expect the company to alter its business model if the rule is rescinded.

Overall, because of the high degree of control of TIAA's salaried distribution force and the strong relationships with sponsoring employers, we have adjusted the rating factor upward for this category to Aa from A.

PRODUCT FOCUS AND DIVERSIFICATION: Aaa -DIVIDEND FLEXIBILITY AND WITHDRAWAL RESTRICTIONS UNIQUE IN THE INDUSTRY

TIAA's primary products are dividend-paying annuities sold through employer-sponsored retirement savings plans. The crediting rates on these annuities, while substantially in excess of those offered by competitors, also have dividend margins that can be adjusted downward if the company is subject to financial stress, which the company has done during economic downturns to preserve capital. Most of these liabilities are also subject to extensive withdrawal restrictions, to an extent that is unique in the industry. Because of the combination of these two factors, we have adjusted this rating factor to Aaa from Aa.

The acquisitions of Nuveen and EverBank expand TIAA's asset management and banking operations, which we view as significantly less creditworthy than the insurance operations. While we note there are some diversification benefits from adding more fee and banking business, this factor is weaker than prior to the transactions.

ASSET QUALITY: A - SIGNIFICANT REAL ESTATE EXPOSURE, BUT MODEST IMPAIRMENTS

The risk profile for TIAA's investment portfolio is good and with a high risk asset ratio of 118%, is consistent with Baa rated peers. The company takes advantage of its unique liability structure to invest in some less liquid assets such as real estate related securities. As of 30 September 2016, TIAA had \$2.0 billion (0.8% of the investment portfolio) in non-agency prime RMBS investments, \$1.4 billion (0.6% of the investment portfolio) in Alt-A related investments, \$2.0 billion (0.8% of the investment portfolio) in sub-prime related investments, and \$10.5 billion of CMBS (4.2% of the investment portfolio). The company also had \$18.7 billion in direct commercial mortgage lending. TIAA recorded other-than-temporary impairments of \$435 million through the first nine months of 2016, which translates into approximately 18 basis points of impairments as a percentage of cash and invested assets.

TIAA also held approximately \$30 billion in equity and alternative investments as of 30 September 2016. The bulk of the exposure, however, is concentrated in Nuveen. Although the acquisitions of Nuveen and EverBank do not increase TIAA's statutory accounting intangibles, it does increase the company's exposure to intangibles when we "look through" the accounting.

Overall, we have left the factor score at the unadjusted scorecard result of A.

CAPITAL ADEQUACY: Aaa - ROBUST CAPITAL AND FLEXIBILITY TO MAINTAIN STRONG CAPITAL IN A STRESS SCENARIO

TIAA had excellent capital adequacy based on the less refined metric of shareholders' equity as a percentage of total assets (11.9% at year-end 2015), which is in line with Moody's expectations for a Aa-rated company. Moody's estimate of TIAA's RBC ratio, a better measure of capital adequacy, at 31 December 2015 was 556%, and we expect it was at a similar level as of year-end 2016. Given the company's high quality capital – they do not have any captives -- we consider TIAA's NAIC company action level RBC ratio to be resilient and well above our minimum expectations for Aaa on the factor.

Also, while the capital level would decline under a stress scenario, we believe that the company would still remain well capitalized. In a downside scenario, the company could protect its capital level by cutting dividends on its accumulating and payout annuities.

Because of the company's robust absolute capital level and the flexibility to maintain strong capital levels in the event of a stress scenario, we have moved the adjusted score on capital adequacy to Aaa, from Aa of the raw score.

PROFITABILITY: A - LOWER EARNINGS METRICS DUE TO LARGE CAPITAL BASE

Based on statutory financial results, TIAA's profitability metrics are slightly low compared to the Aa rating benchmarks. TIAA's return on capital (ROC) averaged 5.3% for the five year period ending 2015.

TIAA reported net income of \$1.25 billion for the first nine months of 2016, versus \$703 million in the same period one year earlier. The increase in income is primarily due to increases in net investment income, somewhat offset by an increase in dividends to policyholders. Historically, TIAA's large policyholder dividends has had a material impact on earnings. Through the first nine months of 2016, TIAA paid \$2.85 billion in dividends to policyholders, compared to \$2.43 billion in the prior year period. TIAA's dividend strategy is geared to the company's capital position rather than earnings: the company will increase dividends when capital grows to above-target levels and cut dividends when company management feels the need to conserve capital, which introduces greater volatility in reported net income. Prolonged low interest rates could place pressure on the company's earnings, which would, in turn, place pressure on dividends. The recent rise in interest rates, if sustainable, should provide some tailwind to TIAA's earnings.

Over the long run, we expect ROC to be constrained to at most the high-single digits, due to TIAA's very strong capital position (which depresses reported return on capital) as well as its emphasis on superior customer value and crediting rates (which also depresses the company's profitability as additional dividends are paid). The Sharpe Ratio component of this factor is consistent with a Baa rating. We have left the adjusted factor rating at A.

Although Nuveen and EverBank's profitability is expected to be more volatile than that of TIAA, this is somewhat offset by the diversity of earnings it affords TIAA. Even including the Nuveen and EverBank acquisition, TIAA is still be expected to largely derive its earnings from core spread based business.

LIQUIDITY AND ASSET/LIABILITY MANAGEMENT (ALM): Aaa - LIABILITY STRUCTURE IS ONE OF THE MOST STABLE IN THE INDUSTRY

TIAA has an outstanding liquidity position, as evidenced by it having one of the strongest results in our liquidity stress testing for US life insurers.

TIAA had approximately \$199 billion in general account liabilities as of 30 September 2016. Only approximately 27% of that amount is withdrawable upon demand by participants. Approximately 13% is in payout mode and is not subject to surrender by participants. Another 59% is in accumulation mode and can only be withdrawn by participants ratably over a ten-year period. In total, TIAA's liability structure gives TIAA one of the best liquidity profiles in the industry. We have left this factor at the scorecard result of Aaa.

FINANCIAL FLEXIBILITY: Aa - LEVERAGE INCREASED AS A RESULT OF NUVEEN TRANSACTION, BUT REMAINS LOW

TIAA's adjusted financial leverage remains very modest, at 12%. In conjunction with the financing of the Nuveen transaction, TIAA issued \$2 billion of surplus notes on 15 September 2014. The company has \$2 billion of senior debt outstanding at Nuveen Finance.

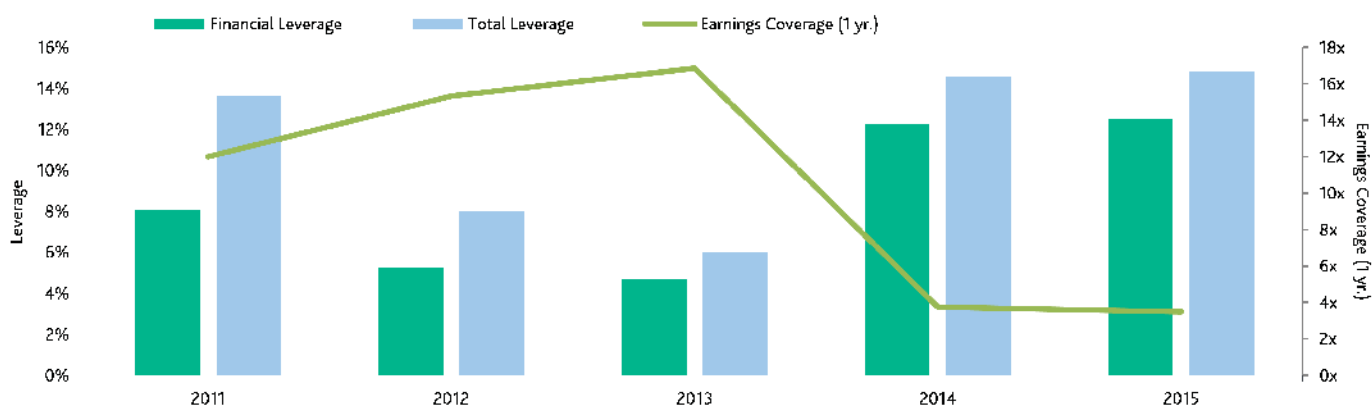
TIAA's earnings coverage was in the 3.5x range at YE 2015 compared to 3.7x for the prior year. We expect earnings coverage to be higher in 2016, but we expect the five year average earnings coverage to come down as the higher earnings coverage from 2011 drops out of the average; nevertheless, we anticipate that the five year average will remain in the Aa range. Interest cost is approximately \$300 million per year at TIAA and approximately \$70 million at Nuveen Finance.

As a non-public company, TIAA's lack of access to the public equity markets limits its financial flexibility compared to its large public counterparts. However, given TIAA's strong financial position, we believe it could issue additional surplus notes, should the need to raise capital arise.

The increase in leverage associated with the Nuveen transaction placed downward pressure on this rating factor. Overall, TIAA's financial flexibility remains robust and we have left the adjusted score for this factor at the scorecard result of Aa.

Exhibit 3

Financial Flexibility



Source: Moody's Investors Service and Company Filings

Liquidity Analysis

TIAA's debt consists of long-term surplus notes, including \$2 billion maturing in 2039; \$1.65 billion maturing in 2044; and \$350 million fixed to floating notes redeemable in 2024, with a final maturity of 2054. The company also has \$2 billion of senior debt outstanding at Nuveen Finance, with \$1 billion maturing in 2019 and \$1 billion in 2024.

TIAA's outstanding liquidity profile is driven by the profile of its liabilities, the majority of which offer policyholders only limited ability to surrender over the immediate term. Additionally, as of 30 September 2016, TIAA reported \$1.7 billion in cash, cash equivalents and short term investments and about \$16.9 billion in US treasury securities.

Other Considerations

TIAA has a very strong commitment to serving its retirement plan participants, and writes primarily business that provides risk sharing with its customers through dividend-paying retirement annuities. Its branding and consumer marketing is tightly linked with its participant focus and commitment to participant value and financial strength.

Considering its generally conservative investment philosophy, together with its emphasis on the sale of dividend-paying products, TIAA presents very conservative business and financial profiles, and the company's management does not stray from its core participant oriented principles, which align well with creditor interests.

Because we incorporate the positive benefits of the company's conservative management philosophy in the different scorecard factors, no additional adjustment is needed.

Rating Methodology and Scorecard Factors

Exhibit 4

Financial Strength Rating Scorecard [1][2]	Aaa	Aa	A	Baa	Ba	B	Caa	Score	Adjusted Score
Business Profile								A	Aaa
Market Position and Brand (15%)								A	Aaa
- Relative Market Share Ratio			X						
Distribution (10%)								A	Aa
- Distribution Control	X								
- Diversity of Distribution				X					
Product Focus and Diversification (10%)								Aa	Aaa
- Product Risk	X								
- Life Insurance Product Diversification			X						
Financial Profile								Aa	Aa
Asset Quality (10%)								A	A
- High Risk Assets % Shareholders' Equity				118.3%					
- Goodwill & Intangibles % Shareholders' Equity	0.0%								
Capital Adequacy (15%)								Aa	Aaa
- Shareholders' Equity % Total Assets		11.9%							
Profitability (15%)								A	A
- Return on Capital (5 yr. avg)			5.3%						
- Sharpe Ratio of ROC (5 yr. avg)				169.5%					
Liquidity and Asset/Liability Management (10%)								Aaa	Aaa
- Liquid Assets % Liquid Liabilities	X								
Financial Flexibility (15%)								Aa	Aa
- Financial Leverage		12.5%							
- Total Leverage		14.8%							
- Earnings Coverage (5 yr. avg)			10.3x						
- Cash Flow Coverage (5 yr. avg)									
Operating Environment								Aaa - A	Aaa - A
Aggregate Profile								Aa3	Aa1

[1] Information based on SAP financial statements as of Fiscal YE December 31, 2015

[2] The Scorecard rating is an important component of the company's published rating, reflecting the stand-alone financial strength before other considerations (discussed above) are incorporated into the analysis

Source: Moody's Investors Service, company filings

Ratings

Exhibit 5

Category	Moody's Rating
TEACHERS INS. AND ANNUITY ASSOC. OF AMERICA	
Rating Outlook	STA
Insurance Financial Strength	Aa1
LT Issuer Rating	Aa2
Surplus Notes	Aa3 (hyb)
TIAA-CREF LIFE INSURANCE COMPANY	
Rating Outlook	STA
Insurance Financial Strength	Aa1

Source: Moody's Investors Service

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