

NEW YORK STATE DEPARTMENT OF FINANCIAL SERVICES
REPORT ON EXAMINATION
OF THE
COLLEGE RETIREMENT EQUITIES FUND

CONDITION:

DECEMBER 31, 2018

DATE OF REPORT:

AUGUST 20, 2019

NEW YORK STATE DEPARTMENT OF FINANCIAL SERVICES

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EXAMINER:

ANNMARIE THOMPSON

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Department of Financial Services

KATHY HOCHUL
Governor

ADRIENNE A. HARRIS
Acting Superintendent

January 14, 2022

Honorable Adrienne A. Harris
Acting Superintendent of Financial Services
New York, New York 10004

Dear Adrienne Harris:

In accordance with instructions contained in Appointment No. 31881, dated March 4, 2019, and annexed hereto, an examination has been made into the condition and affairs of College Retirement Equities Fund, hereinafter referred to as “the Fund,” at its home office located at 730 Third Avenue, New York, NY 10017.

Wherever “Department” appears in this report, it refers to the New York State Department of Financial Services.

The report indicating the results of this examination is respectfully submitted.

1. SCOPE OF EXAMINATION

The prior examination was conducted as of December 31, 2013. This examination covers the period from January 1, 2014, to December 31, 2018. This was a limited scope examination which included: (i) a review or audit of certain targeted balance sheet items considered by this Department to require analysis, verification, or description, (ii) a review of certain targeted member benefit activities of the Fund, and (iii) a review or audit of the items noted in the following paragraph. The balance sheet items targeted for review were bonds, stocks, securities lending, and payable for collateral for securities loaned. The limited scope examination also consisted of a review of how the Fund conducts its business and fulfills its contractual obligations to members. As necessary, the examiner reviewed transactions occurring subsequent to December 31, 2018, but prior to the date of this report (i.e., the completion date of the examination).

The examiner utilized such examination procedures, as deemed appropriate, in such review and in the review or audit of the following matters:

- The Fund's history
- Management and control
- Corporate records
- Territory and plan of operations
- Members' benefits
- Growth of the Fund

The Fund was audited annually, for the years 2014 through 2018, by the accounting firm PricewaterhouseCoopers LLP. The Fund received an unqualified opinion in all years. Certain audit workpapers of the accounting firm were reviewed and relied upon in conjunction with this examination.

The examiner reviewed the prior report on examination which did not contain any violations, recommendations, or comments.

This report on examination is confined to financial statements and comments on those matters which involve departure from laws, regulations or rules, or matters which require explanation or description.

2. DESCRIPTION OF FUND

A. History

The College Retirement Equities Fund was organized as a nonprofit membership corporation under a special act of the New York State Legislature (Chapter 124, Laws of New York State of 1952), effective March 18, 1952. The act specified that the Fund has the status of a nonprofit educational corporation. The act further specified that the Fund shall be subject to the provisions of Article One, Three, Sixteen, and Sections Fifty-Nine, Sixty-Six, Seventy-Eight, and Two-Hundred-Fourteen of the New York Insurance Law in effect as of March 18, 1952, subject to further amendments, not inconsistent with the provisions of the act. The Fund commenced business on July 1, 1952.

The Fund was established as a separate corporation to be a companion organization to the Teachers Insurance and Annuity Association of America (the “Association”). The Fund was organized to provide annuities based on equity investments, while the Association would provide fixed annuity contracts.

In 1988, the Fund registered under the Investment Company Act of 1940 (“the 1940 Act”) as an open-ended diversified management company and filed a registration statement with the Securities and Exchange Commission for certain of its variable annuity certificates. The registration statement was declared effective on April 30, 1988, and, in connection therewith, the Fund was restructured to consist of two distinct investment portfolios: a stock account representing the continuation of the equity portfolio, and a money market account investing primarily in money market instruments. Since then, the Fund has registered and launched six additional accounts.

B. Management

As a not-for-profit corporation, the Fund does not have shareholders. Instead, it has members who hold membership interests. The Fund’s constitution provides that it shall consist of seven members, known individually as “overseers,” and collectively as the “CREF Board of Overseers.” The CREF Board of Overseers shall be the same individuals as the Associations’ Board of Overseers. The constitution also provides that the president of the CREF Board of Overseers shall call an annual meeting each year, to be held on the second Tuesday of June, for

electing or reelecting members to fill vacancies, to elect a president and secretary, and to transact such other business as shall properly come before the meeting. The overseers are elected for a term of seven years with one overseer being elected in each year. If the chief executive officer or any three members shall so determine, the annual meeting of the CREF Board of Overseers may be held on a different date, as shall be specified in the notice of the meeting.

As of December 31, 2018, the members of the CREF Board of Overseers were as follows:

<u>Name and Residence</u>	<u>Principal Business Affiliation</u>	<u>Year First Elected</u>
Rebecca M. Blank Madison, Wisconsin	University of Wisconsin-Madison Chancellor	2018
Scott S. Cowen New Orleans, Louisiana	President Tulane University	2010
Roger W. Ferguson, Jr. Washington, District of Columbia	Chief Executive Officer and President Teachers Insurance and Annuity Association of America College Retirement Equities Fund	2008
Renu Khator Houston, Texas	Chancellor University of Houston System President University of Houston	2017
Cleve L. Killingsworth Hemlock, New York	Former Chairman and CEO Blue Cross Blue Shield of Massachusetts	2007
Michael S. McPherson Chicago, Illinois	President and Director Spencer Foundation	2005
Theodore R. Mitchell Washington, DC	President American Council on Education	2018

Board of Trustees

The Fund's constitution provides that the general management of the property, business, and affairs of the Fund shall be vested in its board of trustees. The board of trustees shall consist of at least 5 trustees and no more than 12, and the number of trustees shall be fixed by a vote of the majority of the board of trustees. The Fund's participants vote for and elect its trustees. This power was ceded to the Fund's participants by the board of trustees as a condition of the Fund's registration as an investment company under the 1940 Act. All trustees shall be elected to a term

of one year. The bylaws specify that the board shall hold an annual meeting, on the third Wednesday in June, for the election of officers, the appointment of committees, and the transaction of such other business as shall properly come before the meeting.

As of December 31, 2018, the board of trustees consisted of ten members. The ten board members and their principal business affiliation were as follows:

<u>Name and Residence</u>	<u>Principal Business Affiliation</u>	<u>Year First Elected</u>
Forrest Berkley Concord, Massachusetts	Former Partner GMO, LLC (formerly Grantham, Mayo, Van Otterloo & Co., LLC)	2006
Joseph A. Boateng Mercer Island, Washington	Chief Investment Officer Casey Family Programs	2018
Janice C. Eberly Evanston, Illinois	Professor Kellogg School of Management at Northwestern University	2018
Nancy A. Eckl Bedford, Texas	Former Vice President American Beacon Advisors, Inc.	2007
Michael A. Forrester Brookline, Massachusetts	Chief Executive Officer Copper Rock Capital Partners, LLC	2007
Howell F. Jackson Cambridge, Massachusetts	Professor of Law Harvard Law School	2005
Thomas J. Kenny Santa Barbara, California	Former Partner Goldman Sachs Asset Management, LP	2011
James M. Poterba Belmont, Massachusetts	Mitsui Professor of Economics Massachusetts Institute of Technology	2006
Maceo K. Sloan Carolina Beach, North Carolina	Former Chairman, President and Chief Executive Officer Sloan Financial Group, Inc.	1991
Laura T. Starks Austin, Texas	Professor McCombs School of Business, University of Texas	2006

The following is a listing of the executive and principal officers of the Fund as of December 31, 2018:

Executive Officers

<u>Name</u>	<u>Title</u>
Roger W. Ferguson	President and Chief Executive Officer
Vijay Advani	Executive Vice President
Glenn E. Brightman	Executive Vice President, Chief Financial Officer and Principal Accounting Officer
Jose Minaya	Executive Vice President
Carol Deckbar	Executive Vice President
Phillip T. Rollock	Executive Vice President and Chief Legal Officer
Christopher A. Van Buren	Executive Vice President
Sean N. Woodroffe	Executive Vice President
Richard S. Biegen	Chief Compliance Officer
Ronald R. Pressman	Executive Vice President

Principal Officers

<u>Name</u>	<u>Title</u>
E. Scott Wickerham	Treasurer
Mona Bhalla	Senior Managing Director and Corporate Secretary

C. Territory and Plan of Operation

The Fund has participating annuity certificate holders residing in 50 states, Canada and 33 foreign countries. The Fund files annual statements to state or government officials in 16 states, and is licensed in five states: Colorado, Maine, New York, Texas, and Utah. In 11 other states, statements are filed either under specific statutory exemption or under recognition by the state insurance departments where the Fund is the companion organization to the Association.

Before 2000, participation in the Fund was only available to employees of nonprofit educational or research institutions, as well as nonprofit ancillary educational institutions. In 2000, the Fund amended its charter to include participation by employees of government agencies and other nonprofit institutions. In general, participants of the Association are eligible to participate in the Fund, except in those cases where the eligible institution does not authorize participation.

As of December 31, 2004, the Fund's participants can elect to participate in variable annuities, both deferred and immediate, in the following investment funds:

1. **The CREF Stock Account**, which offers a long-term rate of return mainly through capital appreciation and investment income by investing primarily in a broadly diversified portfolio of common stock;
2. **The CREF Global Equities Account**, which offers a long-term rate of return through capital appreciation and income through a broadly diversified investment portfolio of domestic and foreign common stock;
3. **The CREF Growth Account**, which offers a long-term rate of return mainly through capital appreciation, primarily from a diversified portfolio of common stocks that present the opportunity for exceptional growth;
4. **The CREF Equity Index Account**, which offers a long-term rate of return through a diversified portfolio selected to track the overall market for common stocks publicly traded in the United States, as represented by a broad stock market index;
5. **The CREF Bond Market Account**, which offers a long-term rate of return primarily through high current income consistent with preserving capital;
6. **The CREF Inflation-Linked Bond Account**, which offers a long-term rate of return that outpaces inflation primarily through investments in inflation linked bonds, and fixed income securities whose returns are designed to track a specific inflation index over the life of the bond;
7. **The CREF Money Market Account**, which offers high current income consistent with maintaining liquidity and preserving capital; and
8. **The CREF Social Choice Account**, which offers a long-term rate of return that reflects the investment performance of the financial market while giving special consideration to certain social criteria.

Participants receiving variable income can transfer their source of retirement income to any other variable account or transfer all or part of their variable income to any fixed annuity of the Association. Participants can redistribute funds between both the Fund and the Association.

3. FINANCIAL STATEMENTS

Effective fiscal year 2007, the Department changed the content and format of the annual statements for retirement systems and pension funds. The new statement presents pension plan funding issues more appropriately, and is based on Generally Accepted Accounting Principles, rather than Statutory Accounting Principles.

The following statements show the assets and liabilities as of December 31, 2018, and the changes in net assets for the years 2014 to 2018 as extracted from the Fund's filed annual statements. These financial statements have been subjected to a limited audit or review as indicated in the Scope of Examination. (See item 2 of this report.)

A. STATEMENT OF NET ASSETS AS OF DECEMBER 31, 2018 (All CREF Accounts Consolidated in '000s)

Assets

Portfolio investments, at value:

Unaffiliated issuers	\$205,986,379
Affiliated issuers	<u>223,283</u>
Total portfolio investments, at value	<u>\$206,209,662</u>
Cash	327,712
Cash – foreign	8,223
Dividends and interest receivable	362,379
Receivable from securities transactions	357,116
Receivable for delayed delivery securities	139,782
Unrealized appreciation on forward foreign currency contracts	1,243
Due from affiliates	54
Receivable for variation margin on open future contracts	2528
Other assets	<u>23,186</u>
Total assets	<u>\$207,431,885</u>

Liabilities

Payable for collateral for securities loaned	\$ 2,370,629
Payable for securities transactions	314,405
Payable for delayed delivery securities	99,467
Due to affiliates	156,916
Investment Management Fees payable	2,527
Service Agreement fees payable	3,121
Payable for variation margin on futures contract	27,858
Written Options	2,235
Payable for trustee compensation	22,601
Unrealized depreciation on swap agreements	1,263
Other liabilities	<u>1,271</u>
Total liabilities	\$ <u>3,002,293</u>
<u>Total net assets</u>	<u>\$204,429,592</u>

Components of net assets:

Accumulation fund	\$192,370,552
Annuity fund	<u>12,059,041</u>
Total net assets	<u>\$204,429,592</u>

B. STATEMENT OF CHANGES IN NET ASSETS
(All CREF Accounts Consolidated in '000s)

	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
<u>From Operations:</u>					
Net investment income	\$ 3,731,502	\$ 3,482,344	\$ 3,691,920	\$ 3,636,304	\$ 4,068,154
Net realized gain (loss) on total investments	21,504,520	12,038,938	4,962,873	14,834,528	19,395,973
Net change in unrealized appreciation (depreciation) on total investments	<u>(10,282,622)</u>	<u>(15,205,506)</u>	<u>6,049,545</u>	<u>23,429,188</u>	<u>(39,034,210)</u>
Net increase (decrease) in net assets resulting from operations	<u>\$ 14,953,400</u>	<u>\$ 315,776</u>	<u>\$ 14,704,338</u>	<u>\$ 41,900,020</u>	<u>\$ (15,570,083)</u>
<u>From Participants:</u>					
Premiums	\$ 13,823,826	\$ 14,058,252	\$ 12,927,909	\$ 11,291,337	\$ 12,329,157
Net transfer between CREF Accounts	0	0	0	0	(4.00)
Annuity payments	(1,587,230)	(1,655,201)	(1,529,733)	(1,574,592)	(1,664,548)
Withdrawals and death benefits	<u>(25,063,607)</u>	<u>(26,799,653)</u>	<u>(26,861,976)</u>	<u>(28,716,986)</u>	<u>(27,628,964)</u>
Net (decrease) in net assets resulting from participant transactions	<u>\$(12,827,011)</u>	<u>\$(14,396,602)</u>	<u>\$(15,463,800)</u>	<u>\$(19,000,241)</u>	<u>\$(16,964,359)</u>
Net increase (decrease) in net assets	<u>\$ 2,126,389</u>	<u>\$(14,080,826)</u>	<u>\$ (759,462)</u>	<u>\$ 22,899,779</u>	<u>\$ (32,534,442)</u>
<u>Net Assets:</u>					
Beginning of year	<u>\$226,778,154</u>	<u>\$228,904,543</u>	<u>\$214,823,717</u>	<u>\$214,064,255</u>	<u>\$236,964,034</u>
End of year	<u>\$228,904,543</u>	<u>\$214,823,717</u>	<u>\$214,064,255</u>	<u>\$236,964,034</u>	<u>\$204,429,592</u>

4. TREATMENT OF PARTICIPANTS

The examiner reviewed a sample of various types of retirement benefits to participants and beneficiaries.

Post Settlement Transfer Coding Error

In April 2020, TIAA discovered a coding error in its actuarial ledgering system impacting certain annuitant post-settlement transfers among investment options supporting their annuity income payments. The error was inadvertently introduced in a 2015 implementation of a new ledgering platform used by TIAA for actuarial functions.

The Annuity Ledger maintained records for all TIAA annuitants; only CREF annuitants were impacted (due to differences in the manner that CREF and TIAA account surpluses are reconciled), and only participants who had annuitized were impacted. The error caused incorrect duplicate transactions to be recorded to the ledgering system, which resulted in incorrect annuity payments to the affected participants and erroneous Annuity Unit Values (“AUVs”) for all eight CREF Accounts.

The coding error resulted in two specific issues impacting the annuity ledger: 1) the payout annuity fund balances (the Accounts’ version of a reserve account balance) were overstated or understated for certain post settlement transfer transactions that involved participants transferring assets from multiple Accounts to one or more Accounts, and 2) non-accounting of certain post settlement transfer transactions that occurred on days where a change in payout methodology was requested.

Two types of remediation were identified: correcting the Account AUVs (Fund Level Remediation) and correcting the annuity payments to impacted annuitants (Annuity Payment Remediation). TIAA recalculated all applicable AUVs since the date of the coding error, which is the date of the implementation of the ledgering system that contained the error and is using those corrected AUVs to calculate the remediation amounts.

Fund Level Remediation

On August 10, 2020 remediation began for the CREF Accounts. The Account remediation totaled approximately \$52.3 million, of which approximately \$36.9 million had been erroneously transferred to the TIAA General Account due to the double counting of transactions in the ledgering system. TIAA completed all Fund-level remediation payments on August 10, 2020, and the AUVs for all accounts are now correct.

Annuitant Payment Remediation

The coding error resulted in TIAA making incorrect payment amounts to affected annuitants during the time period from June 2015 to March 2020. TIAA self-reported this matter to DFS on June 12, 2020 and provided updates on the issue over the next several months. On October 21, 2020, DFS and TIAA agreed on the terms and steps of the remediation plan.

First, TIAA determined to go beyond the 50 basis point materiality standard set forth in its AUV Error Correction policy and treat all AUV errors as material. Second, TIAA will reimburse all CREF annuitants who were underpaid by \$5 or more on a net basis, for the total underpayment during the error period. Accordingly, TIAA will reimburse 93,501 for underpayments. For purposes of this determination, if an annuitant with multiple accounts was erroneously receiving higher payments in one or more accounts and erroneously receiving lower payments in one or more other accounts, TIAA determined the net effect of those erroneous payments. Moreover, TIAA has corrected the system coding and the future payment amounts for the impacted annuitants as of the payments to be made from November 1, 2020.

In addition, TIAA is compensating impacted annuitants for lost earnings. TIAA is basing the lost earnings calculation on the U.S. Department of Labor, Employee Benefits Security Administration Voluntary Fiduciary Correction Program calculator. Furthermore, TIAA is making a one-time payment to 23 annuitants who had been receiving payments from a single annuity account and had received over- payments due to the error. Each one-time payment has been calculated based upon the present value of the amount of estimated future payment attributable to the error. These one-time payments are additional to the amounts of payments the annuitants would have received had there been no error. Finally, TIAA plans to make remediation payments to a small percentage of payment recipients who are beneficiaries or the estates of

annuitants who were impacted by the error. Remediation payments to such beneficiaries and estates are still being reviewed and are not included in the amounts described below.

The estimated total amount of remediation payments to these 93,524 affected annuitants is \$10,962,516, or approximately \$117 per annuitant on average. The number of underpayments constitute \$9,962,516; the earnings adjustment accounts for \$900,000; and the one-time payment to the 23 annuitants who had been receiving erroneously higher payment amounts is approximately \$150,000.

TIAA developed a communication plan to inform impacted annuitants of the remediation payments. TIAA sent letters to these annuitants beginning on October 21, 2020 informing them of the error and that they will receive a subsequent letter with the remediation payment details. The subsequent letters with payment information were sent beginning November 6, 2020. TIAA began making these remediation payments on November 16, 2020.

5. SUBSEQUENT EVENTS

In December 2019, a novel strain of coronavirus—COVID-19—was reported in Wuhan, China. The virus has subsequently spread to other parts of the world, including the United States. On March 11, 2020, the World Health Organization declared the COVID-19 outbreak a pandemic, and on March 13, 2020, President Donald J. Trump declared the pandemic a national emergency. The COVID-19 pandemic has disrupted the United States' economy and caused extreme volatility in the financial markets globally in an unprecedented manner.

The extent to which COVID-19 may affect the Fund's financial condition or results of operations will depend on future developments, including the duration, spread, and intensity of the pandemic. The extent of these future developments is uncertain and not readily determinable as of the date of this report, considering the rapidly evolving landscape. As a result, it is not currently possible to ascertain the overall effect of COVID-19 on the Fund's business.

The Department, along with all insurance regulators and the NAIC, is closely monitoring the evolving situation and the insurance industry through a coordinated effort to assess the effect of the pandemic on various types of insurance, individual insurers, and the insurance industry as a whole.

6. SUMMARY AND CONCLUSION

Following is the comment contained in this report:

<u>Item</u>	<u>Description</u>	<u>Page No.</u>
A	In April 2020, TIAA discovered a coding error in its actuarial ledgering system impacting certain annuitant post-settlement transfers among investment options supporting their annuity income payments. The error was inadvertently introduced in a 2015 implementation of a new ledgering platform used by TIAA for actuarial functions.	11 – 13

Respectfully submitted,

/s/
AnnMarie Thompson
Senior Insurance Examiner

STATE OF NEW YORK)
)SS:
COUNTY OF NEW YORK)

AnnMarie Thompson, being duly sworn, deposes and says that the foregoing report, subscribed by her, is true to the best of her knowledge and belief.

/s/
AnnMarie Thompson

Subscribed and sworn to before me

This _____ day of _____

Respectfully submitted,

_____/s/
Courtney Williams
Principal Insurance Examiner

STATE OF NEW YORK)
)SS:
COUNTY OF NEW YORK)

Courtney Williams, being duly sworn, deposes and says that the foregoing report, subscribed by him, is true to the best of his knowledge and belief.

_____/s/
Courtney Williams

Subscribed and sworn to before me

this _____ day of _____

APPOINTMENT NO. 31881

NEW YORK STATE

DEPARTMENT OF FINANCIAL SERVICES

I, LINDA A. LACEWELL, Acting Superintendent of Financial Services of the State of New York, pursuant to the provisions of the Financial Services Law and the Insurance Law, do hereby appoint:

ANN MARIE THOMPSON

as a proper person to examine the affairs of the

COLLEGE RETIREMENT EQUITIES FUND

and to make a report to me in writing of the condition of said

FUND

with such other information as she shall deem requisite.

In Witness Whereof, I have hereunto subscribed my name
and affixed the official Seal of the Department
at the City of New York

this 4th day of March, 2019

LINDA A. LACEWELL

Acting Superintendent of Financial Services

By:

Mark McLeod

MARK MCLEOD

DEPUTY CHIEF - LIFE BUREAU

