

FEDERAL RETIREMENT THRIFT INVESTMENT BOARD 77 K Street, NE Washington, DC 20002

November 13, 2019

The Honorable Marco Rubio U.S. Senator 284 Russell Senate Office Building Washington, D.C. 20510

The Honorable Mitt Romney U.S. Senator 124 Russell Senate Office Building Washington, D.C. 20510

The Honorable Josh Hawley U.S. Senator 212 Russell Senate Office Building Washington, D.C. 20510

The Honorable Jeanne Shaheen U.S. Senator 506 Hart Senate Office Building Washington, D.C. 20510

The Honorable Kirsten Gillibrand U.S. Senator 478 Russell Senate Office Building Washington, D.C. 20510

The Honorable Rick Scott U.S. Senator 716 Hart Senate Office Building Washington, D.C. 20510

Dear Senators:

Thank you for your letters of August 26 and October 22 regarding the Federal Retirement Thrift Investment Board's (FRTIB) decision relating to the Thrift Savings Plan's (TSP) International (I) Fund. I appreciate the opportunity to explain the FRTIB's decision making process which led to the decision to shift the I Fund index from the MSCI EAFE (Europe, Australasia, Far East) Index to the MSCI All Country World ex USA Investable Market Index (ACWI ex USA IMI).

The FRTIB is an independent Federal agency responsible for administering the TSP, a 401(k)-like plan for Federal employees and members of the uniformed services. The money in each TSP account belongs solely to each TSP participant and is not an asset of the U.S. government.

All decisions regarding TSP administration are made exclusively by statutory fiduciaries at the FRTIB, the Board Members and the Executive Director. The fiduciaries are legally obligated to act "solely in the interest of the [TSP] participants and beneficiaries" and "for the exclusive purpose of providing benefits to participants and their beneficiaries." The law requires the Board to develop investment policies which provide for "prudent investments suitable for accumulating funds for payment of retirement income," and specifically allocates the responsibility for benchmark selection to the Board. In addition, the statute requires the Board to "select an index which is a commonly recognized index comprised of stock, the aggregate market value of which is a reasonably complete representation of the international equity markets excluding the United States equity markets."

The TSP is comprised of five core funds: the G Fund (Government Securities Investment Fund), F Fund (Fixed Income Index Investment Fund), C Fund (Common Stock Index Investment Fund), S Fund (Small Cap Stock Index Investment Fund) and I Fund (International Stock Index Investment Fund). None of the holdings in these funds overlap, which allows TSP participants to diversify efficiently. There are also five Lifecycle Funds, made up of the five core funds.

As would be expected from a prudent fiduciary, the Board regularly conducts reviews to determine whether the current indexes used for the F, C, S, and I Funds continue to be in the best interest of participants and beneficiaries. As mentioned above, for the purposes of the I Fund, the Board is statutorily required to select "an index which is a commonly recognized index comprised of stock, the aggregate market value of which is a reasonably complete representation of the international equity markets

excluding the United States equity markets." In addition, the statute states that the Board must select "prudent investments suitable for accumulating funds for payment of retirement income."

In 2017, the Board hired an investment consultant, Aon, to conduct such a review (enclosed). The consultant reviewed multiple indexes/benchmarks for each Fund, the construction methodology and opportunity set covered by each, the investability and liquidity of the indexes, the acceptance of the indexes by the investment community, the appropriateness of the indexes for the TSP, and the estimated costs associated with making a change.

Specifically, Aon provided the following as the reasons to move from the current MSCI EAFE Index to the MSCI ACWI ex USA IMI Index:

- The MSCI indices remain the most popular indices for U.S. based institutional investors investing in overseas equity markets.
- The transition costs associated with the change in the I Fund benchmark are reasonable.
- Market Exposure:
 - Canada is the fourth-largest equity market in the world, representing 6.6% of the developed non-U.S. equity opportunity set. The new MSCI ACWI ex USA IMI Index includes Canada.
 - Emerging Markets represents 23.5% of the international non-U.S. equity investable universe. The new MSCI ACWI ex USA IMI Index includes emerging markets countries.
 - International small cap represent 14.3% of the international non-U.S. equity investable universe. The new MSCI ACWI ex USA IMI Index includes international small cap equities.

Liquidity:

- The inclusion of emerging markets and international small cap equities to the I Fund will not hinder the ability to meet the TSP's daily liquidity needs.
- Overall, liquidity is managed through the use of the I Fund's cash buffer and other tools such as optimization and derivatives.
- Additionally, historical daily cash flow assessment scaled to 25% illustrates cash flow activity was at reasonable levels to be traded in emerging markets without adversely impacting the prices of securities.

In addition, the MSCI ACWI ex USA IMI Index has registered a higher Sharpe ratio than the MSCI EAFE Index over the majority of periods for which comparative data is available. This is attributed to the inclusion of emerging markets and international small cap equities, which have outpaced developed market equities over the last 15 years. This statistic indicates that the MSCI ACWI ex USA IMI Index has a higher return/lower risk profile than the MSCI EAFE Index which will improve a TSP participant's ability to save for retirement.

The investment consultant noted that institutional investors have embraced non-U.S. equity as an essential asset class in the asset allocation plan. Emerging markets represent nearly a fourth of the non-U.S. equity opportunity set, represent a significant and growing portion of global GDP, and are an increasingly larger portion of the world equity market capitalization. Over the past two decades, emerging economies have expanded at a much faster pace than developed countries. Liquidity in the non-U.S. equity related index products has increased substantially as a result. This increased liquidity is, in part, what enabled the consultant to recommend an index that includes emerging markets.

The Board reviewed the recommendation of the FRTIB Executive Director to adopt this new index at a public meeting in November 2017 and concurred with that recommendation. The process to make that change is currently underway. The delay in implementation from 2017 is due to the procurement process attendant with re-competing our Fund management contract. That request for proposal was issued on May 31, 2019, and an award to two Fund managers is expected to be made by the end of February 2020.

After receiving your first letter, the Board requested that the investment consultant revisit the issue of the I Fund benchmark index to determine whether any of the reasoning listed above had changed. The report, which is also enclosed, found no reason for the investment consultant to revise its recommendation.

The table below from Aon's 2019 study outlines the expected returns and risk (volatility) for developed and emerging markets over the long term. These represent 30-year forward-looking expectations. As you can see, Aon's projected risk and return profile for the MSCI ACWI ex USA IMI Index has improved since 2017.

AHIC's Capital Market Expectations:

Q3 2017	Expected Return	Expected Risk	Sharpe Ratio
Developed Markets	7.3%	20.0%	0.23
Emerging Markets	7.7%	30.0%	0.17
Total International Equity Market	7.7%	21.6%	0.24

Q3 2019	Expected Return	Expected Risk	Sharpe Ratio
Developed Markets	7.5%	20.0%	0.26
Emerging Markets	8.1%	27.5%	0.21
Total International Equity Market	7.9%	20.6%	0.27

Changes from 2017 to 2019	Expected Return	Expected Risk	Sharpe Ratio
Developed Markets	+0.2%	-	+0.3
Emerging Markets	+0.4%	(2.5%)	+0.4
Total International Equity Market	+0.2%	(1.0%)	+0.3

Source: Aon Hewitt Investment Consulting Capital Market Assumptions as of June 30, 2019

The TSP is a retirement savings plan, just like a private sector 401(k) plan. The TSP plays an important role in the retirement plans for millions of current and former Federal employees and members of the uniformed services. It is imperative that the Board provide TSP participants with the same opportunities to save for their retirement as are afforded to every other American. To ensure that the move to the MSCI ACWI ex USA IMI Index would achieve that goal, we asked Aon to review other large employers, as well as the normal practice in target date funds. Aon found that all ten of the largest publicly traded U.S. companies, all ten of the top Federal contractors, and six of the six largest target date fund providers include access to emerging markets. In addition, across the Top 20 largest public (state) plans, Aon found a clear majority of them use a full non-U.S. equity benchmark in their defined benefit plan strategic allocation, as well as in their participant-directed 457(b) plans.

Top 10 largest publicly traded U.S. companies' DC plans

Company	TDF's Non-U.S. Equity Benchmark	Core Lineup Non-U.S. Equity Benchmark
Microsoft Corp	MSCI ACWI ex USA IMI Index (BlackRock's TDF)	MSCI ACWI ex USA Index
Apple Inc.	MSCI ACWI ex USA IMI Index (BlackRock's TDF)	FTSE Global All Cap ex US Index
Amazon.com Inc.	FTSE Global All Cap ex US Index (Vanguard's TDF)	FTSE Global All Cap ex US Index

Facebook Inc.	FTSE Global All Cap ex US Index	FTSE Global All Cap ex US Index
	(Vanguard's TDF)	MSCI Emerging Market Index
Berkshire Hathaway	FTSE Global All Cap ex US Index	FTSE Global All Cap ex US Index
	(Vanguard's TDF)	
Alphabet Inc.	FTSE Global All Cap ex US Index	FTSE Global All Cap ex US Index
	(Vanguard's TDF)	MSCI Emerging Market Index
JP Morgan Chase & Co	MSCIEAFE Index	MSCI EAFE Index
	MSCI Emerging Market Index	MSCI Emerging Market Index
	(JP Morgan TDF)	
Johnson & Johnson	MSCI ACWI ex USA IMI Index	MSCI ACWI ex USA IMI Index
	(Custom TDF)	
Visa Inc.	FTSE Global All Cap ex US Index	FTSE Global All Cap ex US Index
	(Vanguard's TDF)	
Exxon Mobil Corp	MSCI ACWI ex USA Index	MSCI ACWI ex USA Index

 $Source: Dow\ Jones\ Total\ Stock\ Market\ Index\ Holdings\ as\ of\ July\ 31,\ 2019\ and\ Public\ Form\ 5500\ Filings$

Top 10 award Federal Contractors DC plans (Fiscal Year 2018)

Company	TDF's Non-U.S. Equity Benchmark	Core Lineup Non-U.S. Equity Benchmark
Lockheed Martin	N/A	MSCI EAFE IndexMSCI Emerging Market IndexMSCI ACWI Index
The Boeing Company	MSCI ACWI ex USA IMI Index (Custom TDF)	MSCI ACWI ex USA IMI Index
General Dynamics	FTSE Global All Cap ex US Index (Vanguard's TDF)	FTSE Global All Cap ex US Index
Raytheon	N/A	MSCI ACWI ex USA Index
Northrop Grumman	FTSE Global All Cap ex US Index	MSCIEAFE Index
	(Vanguard's TDF)	MSCI Emerging Market Index
McKesson	FTSE Global All Cap ex US Index	MSCI EAFE Index
	(Vanguard's TDF)	MSCI Emerging Market Index
United Technologies	MSCI ACWI ex USA	MSCI EAFE Index
	Index (AB TDF)	MSCI Emerging Market Index
Leidos Holdings	FTSE Global All Cap ex US	FTSE Global All Cap ex US Index
-	Index (Vanguard's TDF)	MSCI Emerging Market Index
Huntington Ingalls	MSCI ACWI ex USA Index	MSCI ACWI ex USA Index
	(BlackRock TDF)	
BAE Systems	FTSE Global All Cap ex US Index	FTSE Global All Cap ex US Index
	(Vanguard's TDF)	MSCI Emerging Market Index

Source: Bloomberg and Publicly Filed Form 5500

Top 20 Largest Public Defined Benefit Plans (as of December 31, 2018)

Company	DB Plan Non-U.S. Equity Benchmark	457(b) Plan Non-U.S. Equity Benchmark
California Public Employees Retirement System	MSCI ACWI IMI Index (Net)	MSCI ACWI ex USA IMI Index
California State Teachers'	MSCI ACWI ex USA IMI Index	MSCI EAFE Index
Retirement System		MSCI Emerging Market Index
New York State Common	MSCI ACWI ex USA IMI Index	MSCI EAFE Index
Retirement Fund		MSCI Emerging Market Index
New York City Retirement System	MSCI ACWI ex USA IMI Index	MSCI ACWI ex USA IMI Index
State Board of	MSCI ACWI ex USA IMI Index	MSCI ACWI ex USA IMI Index
Administration of Florida		
Teacher Retirement System	MSCI EAFE Index	MSCI EAFE Index
of Texas	MSCI Emerging Market Index	
New York State Teachers'	MSCI ACWI ex USA IMI Index	MSCI ACWI Index
Retirement System		MSCI Emerging Market IMI Index
State of Wisconsin	MSCI ACWI ex USA Index	MSCI ACWI ex USA Index
Investment Board		
Washington State	MSCI ACWI ex USA Index	MSCI ACWI Index
Investment Board		MSCI Emerging Market IMI Index
North Carolina Retirement	MSCI ACWI ex USA IMI Index	MSCI ACWI ex USA Index
System		
Ohio Public Employees Retirement System	MSCI ACWI ex USA Index	MSCI ACWI ex USA Index
New Jersey Division of	MSCI EAFE Index	MSCI ACWI ex USA IMI Index
Investments	MSCI Emerging Market Index	
Virginia Retirement System	MSCI ACWI IMI Index	MSCI ACWI ex USA IMI Index
State of Michigan	MSCI ACWI ex USA IMI Index	MSCI ACWI ex USA IMI Index
Retirement Systems		
Oregon Public Employees	MSCI ACWI ex USA IMI Index	MSCI ACWI ex USA IMI Index
Retirement Fund	MOOLACIA!!	MOOLAGUAU LIGA II II .
State Teachers Retirement	MSCI ACWI ex USA IMI Index	MSCI ACWI ex USA IMI Index
System of Ohio	MOOLA CIAIL	ETOE OLI LAU OLI LIOLI I
Minnesota State Board of Investment	MSCI ACWI ex USA IMI Index	FTSE Global All Cap ex US Index
Teachers Retirement System	MSCI EAFE Index	MSCI ACWI ex USA Index
of Georgia	MSCI Emerging Market Index	
Massachusetts Pension Reserves	MSCI EAFE Index	MSCI EAFE Index
Investment	MSCI Emerging Market Index	
Management Board		

Tennessee Consolidated	MSCI EAFE Index	FTSE Global All Cap ex US Index
Retirement System	MSCI Emerging Market Index	

Source: Pensions & Investments and Publicly Available Investment Policy Statements

Target date funds have become the most used investment option within defined contribution ("DC") plans in the United States. At the end of 2018, Fidelity and Vanguard, two of the largest recordkeepers of DC plans, reported that roughly 52% of all participants hold a single target date fund as their sole investment. As of June 30, 2019, Vanguard reported that the top six target date fund providers by assets (i.e., Vanguard, Fidelity, T. Rowe Price, BlackRock, JP Morgan, and American Funds) hold 86% of all assets invested in target date funds—that is, more than \$1.9 trillion. As of June 30, 2019, all six of those listed target date fund providers invest in emerging market equity, including investments in China, as part of the international allocation of their respective target date fund products.

It is important to note that, as illustrated above, investing in emerging markets is not only legal but is the overwhelming choice of fiduciaries across industries and the choice of individual Americans. The Board is fulfilling its role as fiduciary of a retirement plan.

As required on matters relating to investment policy, the Board also consulted with the Employee Thrift Advisory Council (ETAC), a statutorily-created, fifteen member advisory board comprised of Federal and Postal employee unions and management associations. ETAC has provided the Board with helpful insights about the views of the TSP participants that they represent. ETAC met on October 29 and received the same information provided to the Board Members regarding the I Fund index. ETAC's opinion was that TSP participants should have access to the same options as are available to all Americans and that TSP participants should not be disadvantaged in their ability to invest for retirement.

The Office of Foreign Assets Control (OFAC) located with the Department of the Treasury enforces economic and trade sanctions based on US foreign policy and national security goals against targeted foreign countries and regimes, terrorists, international narcotics traffickers, those engaged in activities related to the proliferation of weapons of mass destruction, and other threats to the national security, foreign policy or economy of the United States. To the extent that a comprehensive ban on investing in one or more countries or companies is issued by OFAC, that country or company would be dropped from the index and, thereby, eliminated from the TSP line-up, and no US investor would invest in those countries or companies. That would ensure a level playing field for all Americans who are investing and saving for retirement.

Based on the facts and analysis presented above, the Board has concluded that the addition of the MSCI ACWI ex USA IMI Index is an appropriate choice for inclusion on a defined contribution Fund line-up. I appreciate the opportunity to explain the Board's decision-making process in selecting a new I Fund index. I hope the additional information has been helpful to you. Thank you for your interest in the Thrift Savings Plan.

Sincerely,

Michael Kennedy Chairman

Michael D. Kennedy

Enclosures