

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

January 9, 2019

MEMORANDUM FOR BOARD MEMBERS KENNEDY, BILYEU, McCRAY,

JONES AND JASIEN

FROM: RAVINDRA DEO

EXECUTIVE DIRECTOR

PA

SUBJECT: December 2018 Performance Review - G, F, C, S, I, and L Funds

INTRODUCTION

This report reviews key aspects of the investment performance of the G, F, C, S, I, and L Funds, investment manager performance and tracking error, trading costs, TSP fund performance, and L Fund participation.

TRACKING ERROR - TSP Separate Accounts at BlackRock (BTC)

Monthly Tracking Error

	% BTC	% TSP	% Index	BTC	TSP
<u>Fund</u>	<u>Returns</u>	<u>Returns</u>	<u>Returns</u>	<u>T.E.</u>	<u>vs. BTC</u>
Fixed Income	1.84	1.84	1.84	0.00	0.00
Large Cap	-9.02	-9.03	-9.03	0.01	-0.01
Small Mid Cap	-10.69	-10.70	-10.78	0.09	-0.01
International	-4.82	-4.82	-4.85	0.03	0.00

2018 Year-to-Date (YTD) Tracking Error

	% BTC	% TSP	% Index	BTC	TSP
<u>Fund</u>	<u>Returns</u>	<u>Returns</u>	<u>Returns</u>	<u>T.E.</u>	vs. BTC
Fixed Income	0.19	0.15	0.01	0.18	-0.04
Large Cap	-4.37	-4.41	-4.38	0.01	-0.04
Small Mid Cap	-9.23	-9.26	-9.57	0.34	-0.03
International	-13.37	-13.43	-13.79	0.42	-0.06

BlackRock's performance for the F and C Funds was in-line with indices for the month. The S Fund outperformed the Small Cap Index by 9 basis points primarily due to securities sampling. The I Fund was ahead of the International Index by 3 basis points primarily due to tax effect. For the F Fund year-to-date, BlackRock outperformed the Fixed Income Index by 18 basis points primarily due to securities lending. Its performance for the C Fund was in-line with the Large Cap Index. Its performance for the S Fund was ahead of the Small Cap Index by 34 basis points year-to-date, primarily due to securities lending and sampling. BlackRock through year-end, outperformed the International Index in the I Fund by 42 basis points primarily due to tax effect.

Trading Costs

		Trading Co	sts
<u>F Fund</u>	<u>Dollar Amount</u> <u>Traded</u>	<u>Dollars</u>	Basis Points
December Year-to-Date	851,820,349 10,518,918,212	86,877 245,360	1.0 0.2
C Fund			
December Year-to-Date	3,404,019,067 34,558,092,207	3,277,107 (3,032,207)	9.6 -0.9
<u>S Fund</u>			
December Year-to-Date	1,856,590,205 21,060,766,103	1,497,173 (4,871,258)	8.1 -2.3
<u>I Fund</u>			
December Year-to-Date	2,175,081,036 20,551,638,995	2,051,075 8,765,341	9.4 4.3

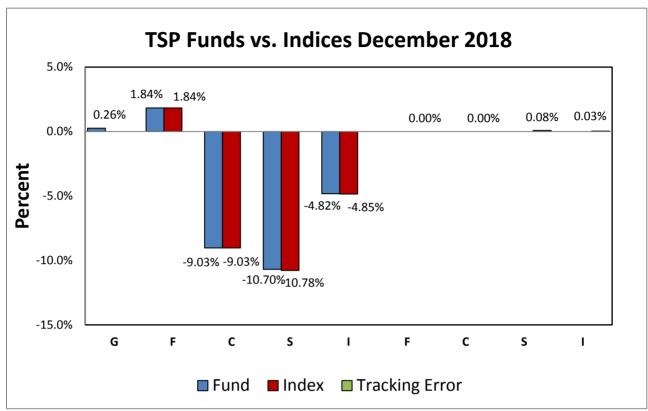
^{* --} Trading Costs are comprised of commissions, fees, and the difference between the price at which a security is traded and the closing index price.

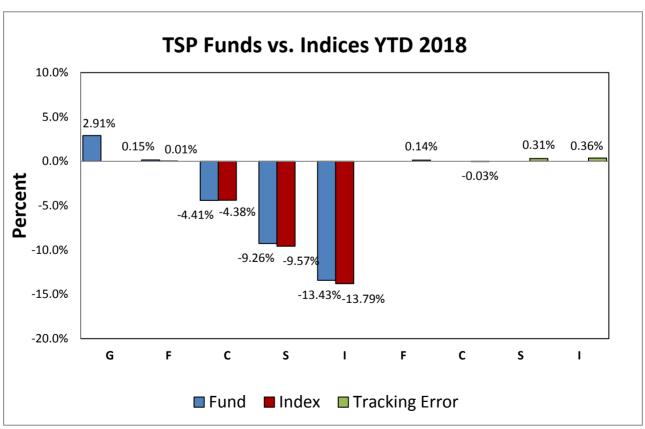
TSP Funds (as of December 31, 2018) Returns

	Annualized (%)			
	1 Year	3 Year	5 Year	10 Year
G Fund	2.91%	2.35%	2.28%	2.30%
		•		
F Fund	0.15%	2.28%	2.88%	3.73%
Bloomberg Barclays U.S. Agg Bond Index	0.01%	2.06%	2.52%	3.48%
Tracking Error	0.14%	0.22%	0.36%	0.25%
г				
C Fund	-4.41%	9.26%	8.53%	13.17%
S&P 500 Index	-4.38%	9.26%	8.49%	13.12%
Tracking Error	-0.03%	0.00%	0.04%	0.05%
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S Fund	-9.26%	7.67%	5.49%	13.67%
DJ U.S. Completion TSM Index	-9.57%	7.33%	5.15%	13.53%
Tracking Error	0.31%	0.34%	0.34%	0.14%
<u>-</u>				
I Fund	-13.43%	3.50%	0.88%	6.48%
MSCI EAFE (Net) Index	-13.79%	2.87%	0.53%	6.32%
Tracking Error	0.36%	0.63%	0.35%	0.16%
Lifecycle Funds Returns				
L Income	0.71%	3.47%	3.21%	4.41%
L 2020	-0.36%	4.90%	4.22%	7.62%
L 2030	-3.58%	5.75%	4.79%	8.91%
L 2040	-4.89%	6.22%	5.10%	9.81%
L 2050	-6.02%	6.65%	5.33%	N/A

Performance of TSP Funds Total Returns

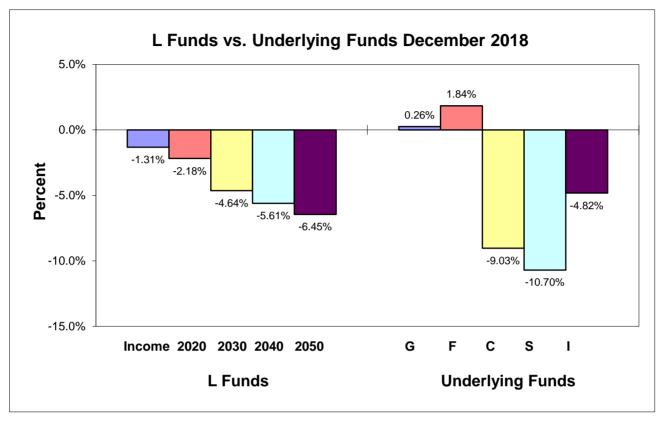
The charts below show the G, F, C, S, and I Fund net rates of return vs. respective benchmark index.

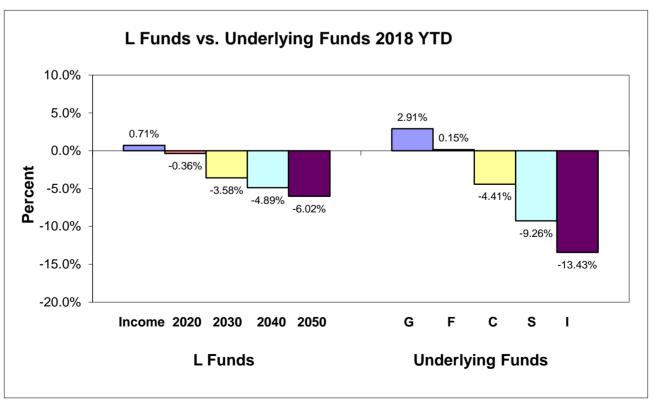




L Funds

The net rates of return for the L Funds are shown below along with comparable returns for the G, F, C, S, and I Funds.





Attachment 1 provides a summary of TSP investment activity and participation rates.

PROXY VOTING -- THIRD QUARTER 2018

An audit of BTC's proxy voting conducted by ISS found no exceptions to BTC's established guidelines during the third quarter of 2018. A copy of the audit report is provided in this report. The ISS audit report for the fourth quarter of 2018 is not yet available.

CLASS ACTION SETTLEMENTS -- THIRD QUARTER 2018

The Third Quarter began with fifty-seven open claims. Three claims were opened in the C Fund and eight claims were opened in the S Fund during the quarter. One claim was closed due to Administrator action and four claims were settled in the S Fund for \$20,468. Sixty-three claims remained open across the four funds at the end of the quarter. For the year, eleven claims were settled for \$390,904.

	Open at Start of Quarter	Opened during Quarter	Closed during Quarter	Open Claims Outstanding	Estimate of Settled Claims in 2018 (\$)
F Fund	18	-	-	18	\$0
C Fund	5	3	-	8	\$294,538
S Fund	34	8	5	37	\$96,366
I Fund	-	-	-	-	\$0
Total	57	11	5	63	\$390,904

RECOMMENDATION

The G Fund investments produce long-term yields while incurring no market risk. I recommend reaffirmation of the current G Fund policy of investing solely in short-term maturities.

The F, C, S, and I Funds have tracked their respective indices and have incurred low trading costs. I recommend reaffirmation of the current F, C, S, and I Fund investment policies.

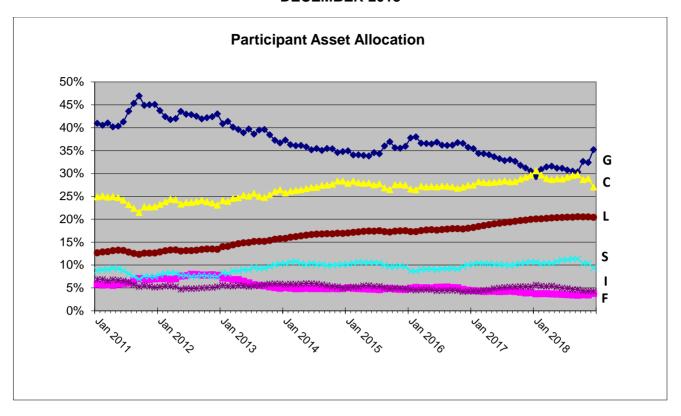
WHEREAS the Federal Employees' Retirement System Act of 1986, as amended (5 U.S.C. § 8401 -- et seq.) provides the Board members shall establish policies for the investment and management of the Thrift Savings Fund (5 U.S.C. § 8472(f) (1) and (2)); and

WHEREAS the Board members at this meeting have reviewed the investment performance and investment policies of the Government Securities Investment Fund, the Fixed Income Index Investment Fund, Common Stock Index Investment Fund, the Small Capitalization Stock Index Investment Fund and the International Stock Index Investment Fund; and

WHEREAS the Board members are satisfied with the investment performance and investment policies of these Funds:

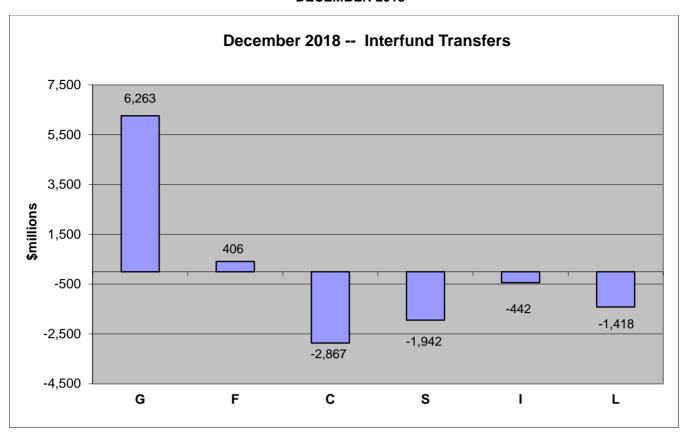
NOW THEREFORE BE IT RESOLVED that the current investment policies for the Government Securities Investment Fund, the Common Stock Index Investment Fund, the Fixed Income Index Investment Fund, the Small Capitalization Stock Index Investment Fund, and the International Stock Index Investment Fund are affirmed without change.

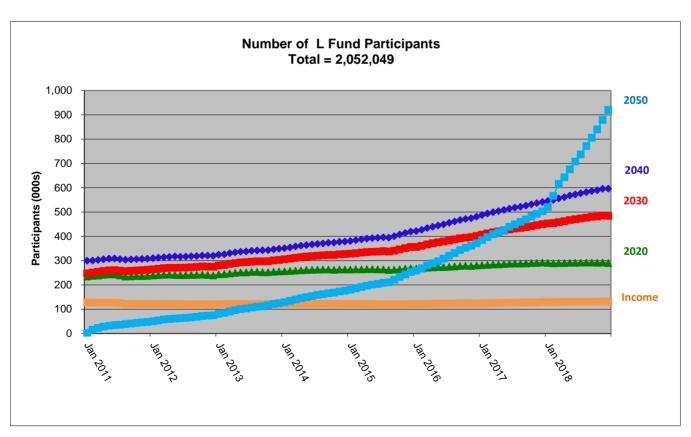
Attachments



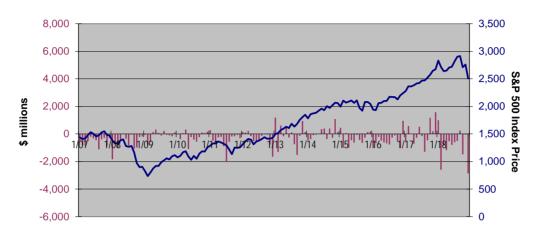
TSP Assets Participant Allocation (December 31, 2018)		
<u>Fund</u>	Dollars (Billion USD)	<u>Percent</u>
G Fund	\$188.92	35.3%
F Fund	\$20.20	3.8%
C Fund	\$144.77	27.0%
S Fund	\$50.07	9.3%
I Fund	\$22.60	4.2%
L Fund	<u>\$109.31</u>	20.4%
Total	\$535.87	100%

TSP Assets By Core Funds (December 31, 2018)			
<u>Fund</u>	<u>Dollars</u> (Billion USD)	<u>Percent</u>	
G Fund	\$230.30	43.0%	
F Fund	\$27.64	5.2%	
C Fund	\$177.55	33.1%	
S Fund	\$59.70	11.1%	
I Fund	\$40.69	7.6%	
Total	<u>\$535.87</u>	<u>100.0%</u>	

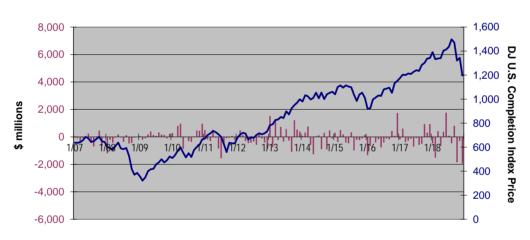




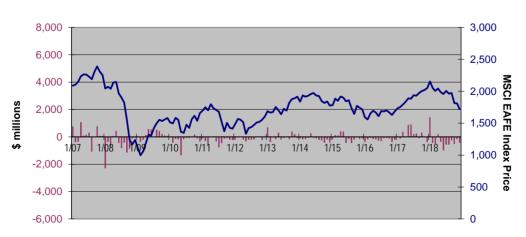
Monthly Interfund Transfers C Fund



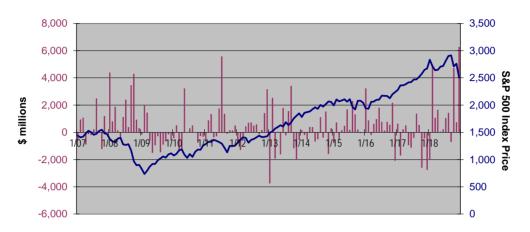
Monthly Interfund Transfers S Fund



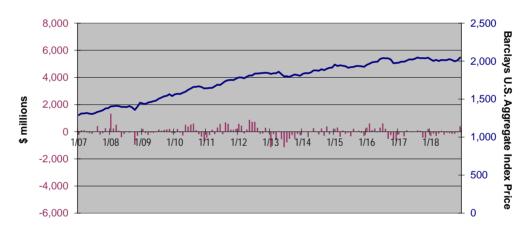
Monthly Interfund Transfers I Fund



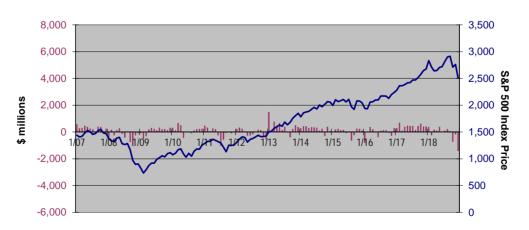
Monthly Interfund Transfers G Fund



Monthly Interfund Transfers F Fund



Monthly Interfund Transfers L Funds





October 15, 2018

Ms. Michelle Edkins
Managing Director
Corporate Governance & Responsible Investment
BlackRock
55 East 52nd St
New York, NY 10055

Dear Michelle,

Enclosed are the results of our review of US proxy votes by BlackRock for the 3rd quarter of 2018. Our review found that there were no exceptions to policy over this period.

Best regards,

Fassil G. Michael

Executive Director, Head of Custom Research



MEMORANDUM

The results of our review of BlackRock's 3rd quarter proxy voting for US meetings are as follows:

- Votes at 38 meetings were examined.
- Votes at 18 of the 38 meetings were for directors, auditors, and/or management say-on-pay (MSOP) only.
- At the 20 remaining meetings, there were 37 non-director/auditor/MSOP proposals.

The following table illustrates the votes involved by proposal type:

Proposal	Votes
Executive stock option plan	8
Advisory vote on golden parachute compensation	5
Frequency vote on MSOP	2
Increase in common stock	2
Conversion of securities	1
Approve merger agreement	5
Issue shares in connection with merger	1
Issuance of shares pursuant to an acquisition	1
Sale of company assets	1
Adjourn meeting	9
Increase in board size	1
Ratify bylaw amendment	1
Total:	37

- There were 8 votes cast on executive stock option plans:
 - a) 6 votes were cast in favor of the plans (75 percent);
 - b) 1 vote was cast against the plan due to the ability to reprice options without shareholder approval (12.5 percent)
 - c) 1 vote was cast against the plan due to both the ability to reprice options without shareholder approval, and the presence of an evergreen provision (12.5 percent).
- There were 2 votes cast on increases in authorized common stock; the votes were cast in favor of the increases.
- There were 8 votes cast on mergers, acquisitions and/or major corporate transactions, including issuances
 of shares pursuant to a merger and acquisition, and a sale of assets; the votes were cast in favor of the
 transactions.
- There were 20 votes cast on management advisory votes on executive compensation; the votes were cast in favor of the advisory votes.
- There were 5 votes cast on management advisory votes on golden parachute compensation; the votes were cast in favor of the advisory votes.

There were no exceptions to policy this period.