

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

October 15, 2018

MEMORANDUM FOR BOARD MEMBERS KENNEDY, BILYEU, McCRAY,

JONES AND JASIEN

FROM: RAVINDRA DEO

EXECUTIVE DIRECTOR

PA

SUBJECT: September 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>	Returns	<u>Returns</u>	<u>T.E.</u>	vs. BTC
Fixed Income	-0.62	-0.62	-0.64	0.02	0.00
Large Cap	0.57	0.57	0.57	0.00	0.00
Small Mid Cap	-1.76	-1.76	-1.75	-0.01	0.00
International	0.91	0.91	0.87	0.04	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	-1.46	-1.48	-1.60	0.14	-0.02
Large Cap	10.57	10.54	10.56	0.01	-0.03
Small Mid Cap	10.87	10.85	10.66	0.21	-0.02
International	-1.02	-1.06	-1.43	0.41	-0.04

BlackRock's performance for the F, C and S Funds was in-line with indices for the month. The I Fund was ahead of the Fixed Income Index by 4 basis points primarily due to tax effect. BlackRock outperformed the Fixed Income Index by 14 basis points year-to-date, primarily due to securities lending. Year-to-date, the C Fund was in-line with the Large Cap Index. BlackRock was ahead of the Small Cap Index by 21 basis points year-to-date, primarily due to securities lending and sampling. Its performance was ahead of the International Index by 41 basis points year-to-date, primarily due to tax effect.

The TSP Funds closely tracked the BTC Accounts for the month and year-to-date.

Trading Costs

		Trading Costs			
<u>F Fund</u>	<u>Dollar Amount</u> <u>Traded</u>	Dollars	Basis Points		
September Year-to-Date	353,317,419 7,560,376,734	(451) 157,659	0.0 0.2		
C Fund					
September Year-to-Date	1,426,073,193 24,070,731,013	(149,953) (9,198,265)	-1.1 -3.8		
S Fund					
September Year-to-Date	1,905,413,165 15,410,169,325	(363,882) (6,329,201)	-1.9 -4.1		
<u>I Fund</u>					
September Year-to-Date	1,678,649,518 15,160,936,275	(241,375) 5,324,351	-1.4 3.5		

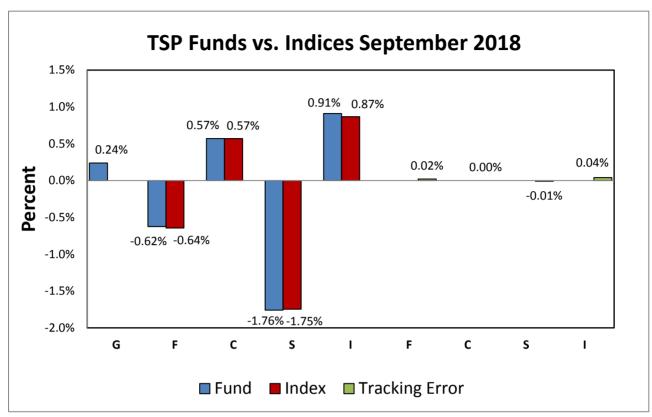
^{* --} Trading Costs are comprised of commissions, fees, and the difference between the price at which a security is traded and the closing index price.

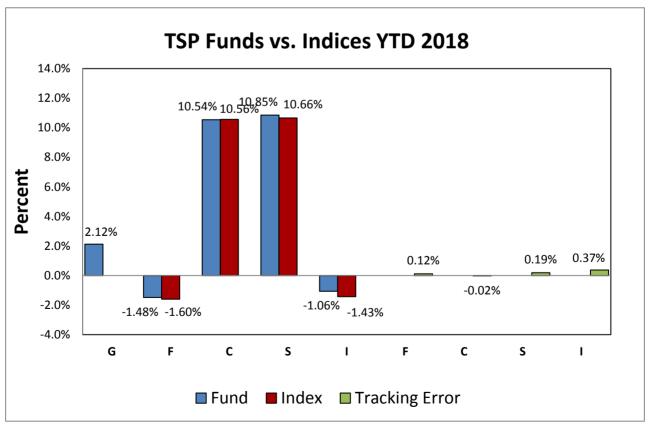
TSP Funds (as of September 30, 2018) Returns

	Annualized (%)				
	1 Year	3 Year	5 Year	10 Year	
G Fund	2.72%	2.27%	2.24%	2.31%	
		•			
F Fund	-1.05%	1.55%	2.54%	4.02%	
Bloomberg Barclays U.S. Agg Bond Index	-1.22%	1.31%	2.16%	3.77%	
Tracking Error	0.17%	0.24%	0.38%	0.25%	
		·			
C Fund	17.88%	17.33%	13.99%	12.01%	
S&P 500 Index	17.91%	17.31%	13.95%	11.97%	
Tracking Error	-0.03%	0.02%	0.04%	0.04%	
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S Fund	16.22%	16.33%	11.62%	12.46%	
DJ U.S. Completion TSM Index	16.02%	15.96%	11.29%	12.34%	
Tracking Error	0.20%	0.37%	0.33%	0.12%	
<u>-</u>					
I Fund	3.15%	9.63%	4.77%	5.50%	
MSCI EAFE (Net) Index	2.74%	9.23%	4.42%	5.38%	
Tracking Error	0.41%	0.40%	0.35%	0.12%	
Lifecycle Funds Returns					
L Income	4.59%	4.77%	4.11%	4.32%	
L 2020	6.02%	7.28%	6.00%	6.64%	
L 2030	8.81%	10.10%	7.82%	8.06%	
L 2040	9.96%	11.45%	8.71%	8.85%	
L 2050	11.01%	12.69%	9.47%	NA	

Performance of TSP Funds Total Returns

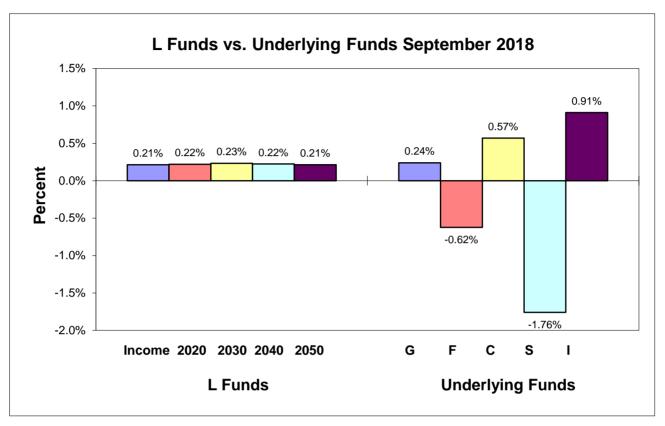
The charts below show the G, F, C, S, and I Fund net rates of return vs. respective benchmark index.

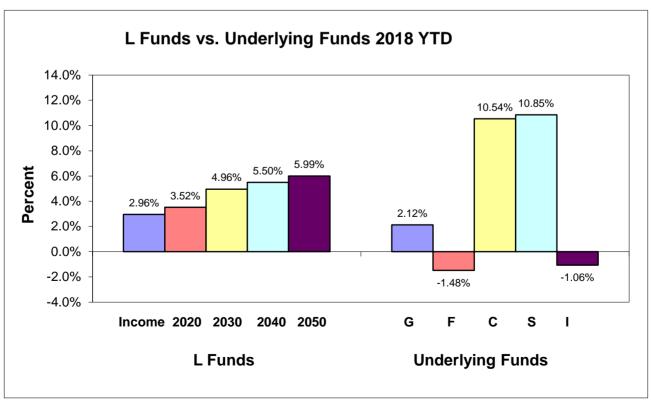




L Funds

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 -- SECOND QUARTER 2018

An audit of BTC's proxy voting conducted by ISS found no exceptions to BTC's established guidelines during the second quarter of 2018. A copy of the audit report is provided as Attachment 2. The ISS audit report for the third quarter of 2018 is not yet available.

CLASS ACTION SETTLEMENTS -- SECOND QUARTER 2018

The Second Quarter began with forty-two open claims. Seventeen claims were opened in the F Fund and seven claims were opened in the S Fund during the quarter. Two claims were settled in the C Fund for \$75,978. Two claims were closed due to Administrator action and five claims were settled in the S Fund for \$53,441. Fifty-seven claims remained open across the four funds at the end of the quarter. For the year, eleven claims were settled for \$370,436.

	Open at Start of Quarter	Opened during Quarter	<u>Closed</u> <u>during</u> <u>Quarter</u>	Open Claims Outstanding	Estimate of Settled Claims in 2018 (\$)
F Fund	1	17	-	18	\$0
C Fund	7	-	2	5	\$294,538
S Fund	34	7	7	34	\$75,898
I Fund	-	-	-	-	\$0
Total	42	24	9	57	\$370,436

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.

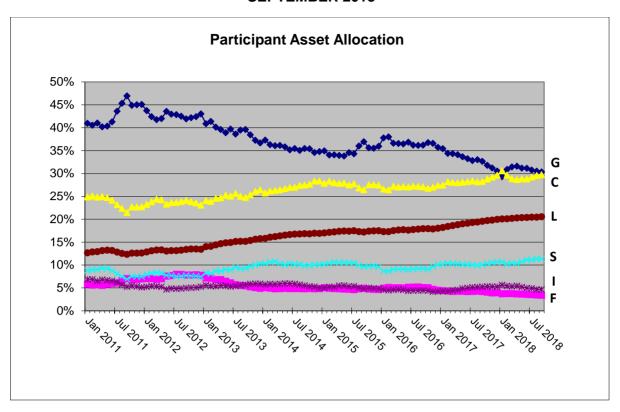
WHEREAS the Federal Employees' Retirement System Act of 1986, as amended (5 U.S.C. § 8401 -- et seq.) provides the Board members shall establish policies for the investment and management of the Thrift Savings Fund (5 U.S.C. § 8472(f) (1) and (2)); and

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

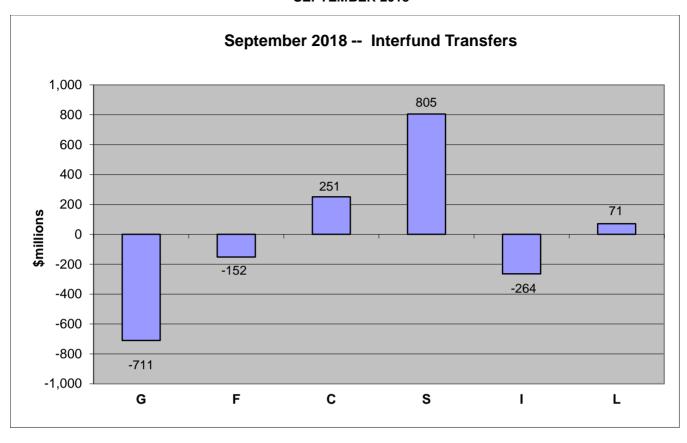
WHEREAS the Board members are satisfied with the investment performance and investment policies of these Funds:

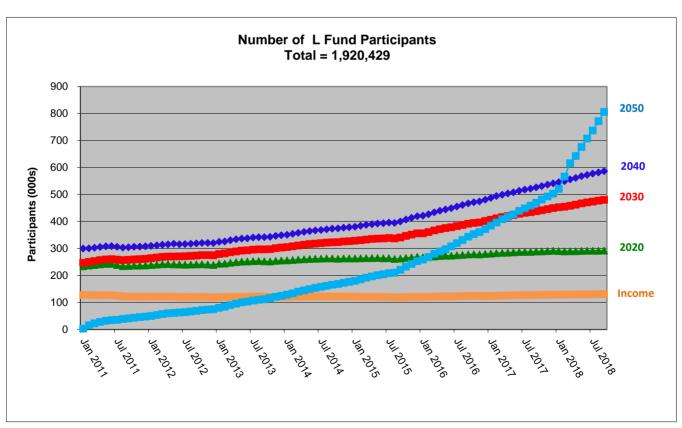
NOW THEREFORE BE IT RESOLVED that the current investment policies for the Government Securities Investment Fund, the Common Stock Index Investment Fund, the Fixed Income Index Investment Fund, the Small Capitalization Stock Index Investment Fund, and the International Stock Index Investment Fund are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

Attachments

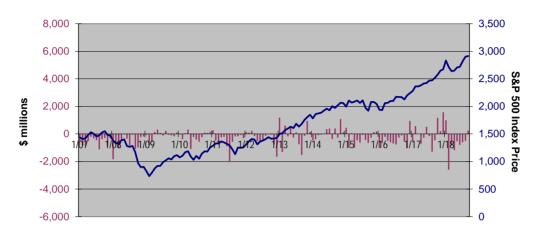


TSP Assets Participant Allocation (September 30, 2018)		TSP Assets By Core Funds (September 30, 2018)				
<u>Fund</u>	Dollars (Billion USD)	<u>Percent</u>	<u>Fund</u>	<u>Dollars</u> (Billion USD)	<u>Percent</u>	
G Fund	\$176.1	30.4%	G Fund	\$220.3	38.1%	
F Fund C Fund	\$19.7 \$171.9	3.4% 29.7%	F Fund	\$27.7	4.8%	
S Fund	\$65.4	11.3%	C Fund	\$208.1	35.9%	
I Fund	\$26.8	4.6%	S Fund	\$76.1	13.1%	
L Fund	<u>\$118.9</u>	<u>20.5%</u>	I Fund	<u>\$46.7</u>	<u>8.1%</u>	
Total	\$578.8	100%	Total	\$578.8	100%	

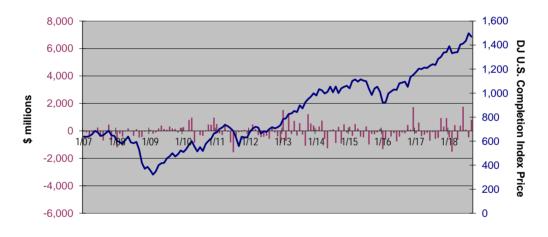




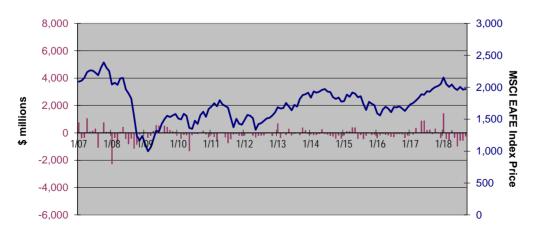
Monthly Interfund Transfers C Fund



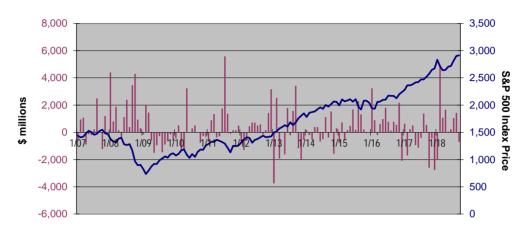
Monthly Interfund Transfers S Fund



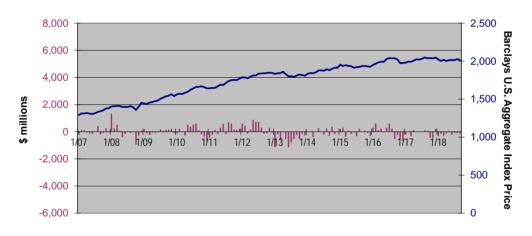
Monthly Interfund Transfers I Fund



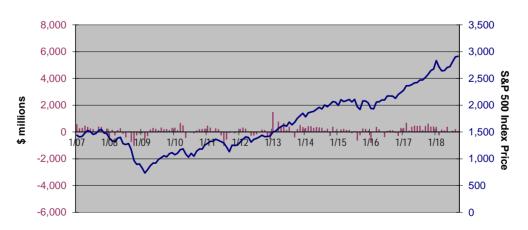
Monthly Interfund Transfers G Fund



Monthly Interfund Transfers F Fund



Monthly Interfund Transfers L Funds





July 23, 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 2nd 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

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MEMORANDUM

The results of our review of BlackRock's 2nd quarter proxy voting for US meetings are as follows:

- Votes at 282 meetings were examined.
- Votes at 148 of the 282 meetings were for directors, auditors, and/or management say-on-pay (MSOP) only.
- At the 134 remaining meetings, there were 214 non-director/auditor/MSOP proposals.

The following table illustrates the votes involved by proposal type:

Proposal	Votes
Executive stock option plan	58
Non-executive stock option plan	4
Employee share purchase plan	12
Approve repricing of options	1
Approve remuneration of non-employee directors	1
Frequency vote on MSOP	16
Increase in common stock	10
Reduce authorized and preferred stock	1
Reduce authorized stock	3
Reverse stock split	5
Approve conversion of securities	1
Approve merger agreement	1
Issue shares in connection with merger	2
Issue shares in connection with purchase agreement	1
Approve formation of holding company	1
Adjourn meeting	8
Amend NOL rights plan	2
Fix number of directors	1
Increase size of board	1
Declassify board of directors	6
Provide right to call special meeting	2
Provide proxy access	2
Eliminate preemptive rights	1
Reduce supermajority vote requirement	6
Eliminate supermajority vote requirement	5
Opt out of state control share acquisition law	1
Amend securities transfer restrictions	1
Repeal bylaws	1
Amend articles/bylaws/charter	3
Amend declaration of trust	2
Approve subadvisory agreement	1
Other business	5
Shareholder proposal	49
Total:	214

- There were 58 votes cast on executive stock option plans:
 - a) 53 votes were cast in favor of the plans (91.4 percent);
 - b) 5 votes were cast against the plans (8.6 percent);
 - i.) 1 plan was opposed due to the ability to reprice options without prior shareholder approval and the presence of an evergreen provision:
 - ii.) 1 plan was opposed solely due to the ability to reprice options without prior shareholder approval;
 - iii.) 3 plans were opposed solely due to the presence of an evergreen provision:
- There were 4 votes cast on non-executive stock option plans; the votes were cast in favor of the plans.
- There were 10 votes cast on increases in authorized common stock; the votes were cast in favor of the increases.
- There were 3 votes cast on mergers, acquisitions and/or major corporate transactions, including 2
 proposals to issue shares pursuant to a merger or acquisition, and one proposal to issue shares in
 connection with a share purchase agreement; all votes were cast in favor of the transactions.
- There were 49 votes cast on shareholder proposals which included:
 - a) 9 shareholder proposals to require independent board chairman:
 - i.) 3 votes were cast in favor of the proposals (33.3 percent);
 - ii.) 6 votes were cast against the proposals (66.7 percent).
 - b) 3 shareholder proposals to require majority voting for the election of directors:
 - i.) 2 votes were cast in favor of the proposals (66.7 percent);
 - ii.) 1 vote was cast against the proposals (33.3 percent).
 - c) 1 shareholder proposal to declassify the board; the vote was cast in favor of the proposal.
 - d) 1 shareholder proposal to adopt proxy access right; the vote was cast in favor of the proposal.
 - e) 5 shareholder proposals to amend proxy access right; the votes were cast against the proposals.
 - f) 6 shareholder proposals to provide right to act by written consent:
 - i.) 2 votes were cast in favor of the proposals (33.3 percent);
 - ii.) 4 votes were cast against the proposals (66.7 percent).
 - g) 6 shareholder proposals to reduce ownership threshold to call special meeting; the votes were cast against the proposals.
 - 1 shareholder proposal to eliminate supermajority vote requirement; the vote was cast in favor of the proposal.
 - 1 shareholder proposal to adopt policy to increase board diversity; the vote was cast in favor of the proposal.
 - j) 1 shareholder proposal to disclose board diversity and qualification matrix; the vote was cast against the proposal.
 - k) 1 shareholder proposal to amend clawback policy; the vote was cast against the proposal.
 - 1 shareholder proposal to report on integrating risks related to drug pricing into senior executive compensation; the vote was cast against the proposal.
 - m) 1 shareholder proposal to effectuate a tax-deferred spin-off; the vote was cast against the proposal.
 - 2 shareholder proposals to report on lobbying contributions; the votes were cast against the proposals.
 - o) 1 shareholder proposal to report on benefits of adoption renewable energy goals; the vote was cast against the proposal.
 - p) 1 shareholder proposal to adopt policy to phase out use of medically important antibiotics in supply chain; the vote was cast against the proposal.

- q) 1 shareholder proposal to report on methane gas emissions management and reduction; the vote was cast against the proposal.
- r) 1 shareholder proposal to report on distributed renewable generation resources; the vote was cast against the proposal.
- s) 1 shareholder proposal to report on billing practices; the vote was cast against the proposal.
- t) 1 shareholder proposal to report on sustainability including GHG goals; the vote was cast against the proposal;
- u) 1 shareholder proposal to adopt quantitative company-wide GHG goals; the vote was cast against the proposal.
- v) 1 shareholder proposal to assess environmental impact of non-recyclable packaging; the vote was cast against the proposal.
- w) 1 shareholder proposal to prepare employment diversity report and report on diversity policies; the vote was cast against the proposal.
- x) 1 shareholder proposal to report on race or ethnicity pay gap; the vote was cast against the proposal.
- There were 161 votes cast on management advisory votes on executive compensation:
 - a) 154 votes were cast in favor of the advisory votes (95.7 percent);
 - b) 7 votes were cast against the advisory votes (4.3 percent)

There were no exceptions to policy this period.