



December 6, 2018

MEMORANDUM FOR THE EXECUTIVE DIRECTOR

FROM: SEAN MCCAFFREY  
 CHIEF INVESTMENT OFFICER

SUBJECT: November 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***

<b><u>Fund</u></b>	<b><u>% BTC Returns</u></b>	<b><u>% TSP Returns</u></b>	<b><u>% Index Returns</u></b>	<b><u>BTC T.E.</u></b>	<b><u>TSP vs. BTC</u></b>
Fixed Income	0.62	0.62	0.60	0.02	0.00
Large Cap	2.04	2.04	2.04	0.00	0.00
Small Mid Cap	1.92	1.92	1.84	0.08	0.00
International	-0.13	-0.13	-0.13	0.00	0.00

***2018 Year-to-Date (YTD) Tracking Error***

<b><u>Fund</u></b>	<b><u>% BTC Returns</u></b>	<b><u>% TSP Returns</u></b>	<b><u>% Index Returns</u></b>	<b><u>BTC T.E.</u></b>	<b><u>TSP vs. BTC</u></b>
Fixed Income	-1.62	-1.65	-1.79	0.17	-0.03
Large Cap	5.11	5.08	5.11	0.00	-0.03
Small Mid Cap	1.63	1.61	1.35	0.28	-0.02
International	-8.99	-9.04	-9.39	0.40	-0.05

BlackRock's performance for the F, C, and I Funds was in line with indices for the month. For the S Fund, BlackRock outperformed the Small Cap Index by 8 basis points, primarily due to sampling and securities lending. For the F Fund year-to-date, BlackRock outperformed the Fixed Income Index by 17 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 28 basis points year-to-date, primarily due to securities lending and sampling. BlackRock outperformed the International Index in the I Fund by 40 basis points year-to-date, primarily due to tax effect.

The TSP Funds closely tracked the BTC Accounts for the month. The S Fund closely tracked the BTC Accounts year-to-date. The F Fund, C Fund, and I Fund tracked slightly lower year-to-date due to trading costs.

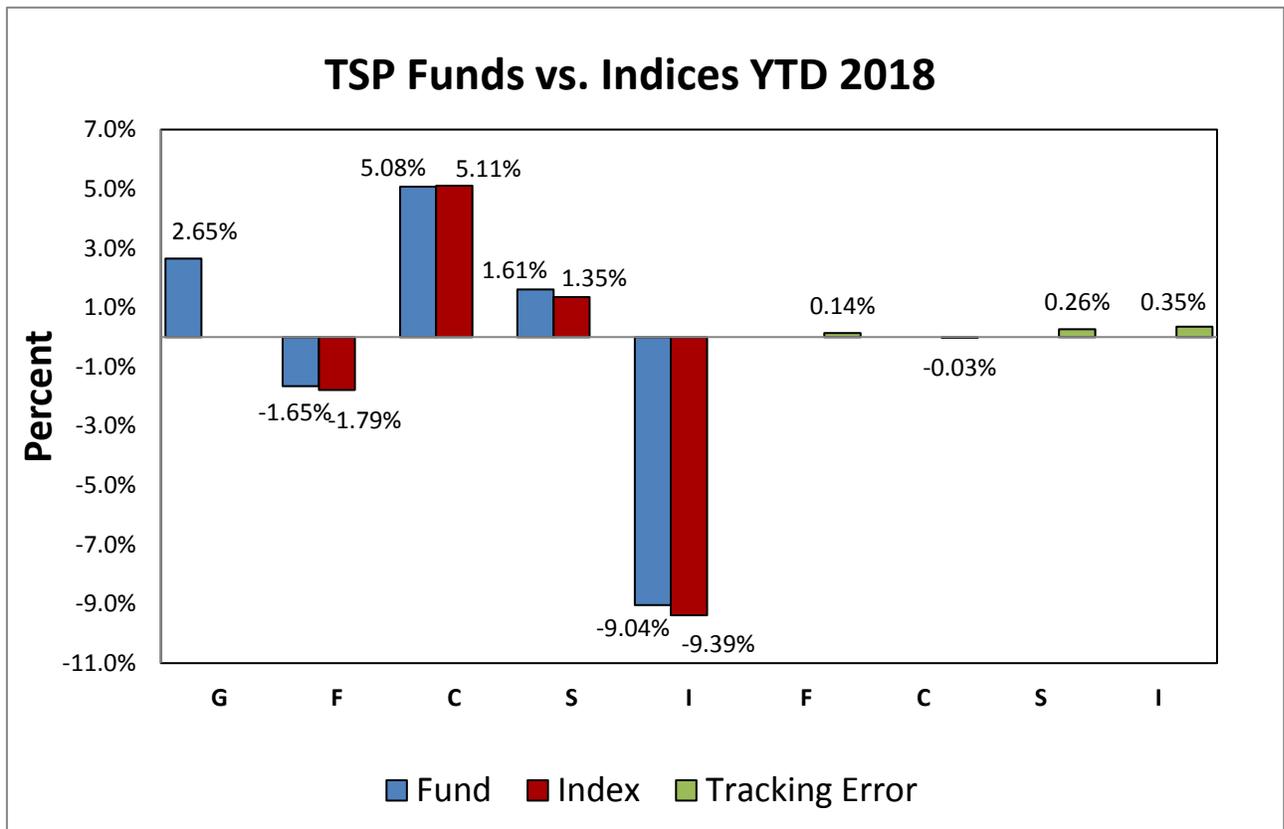
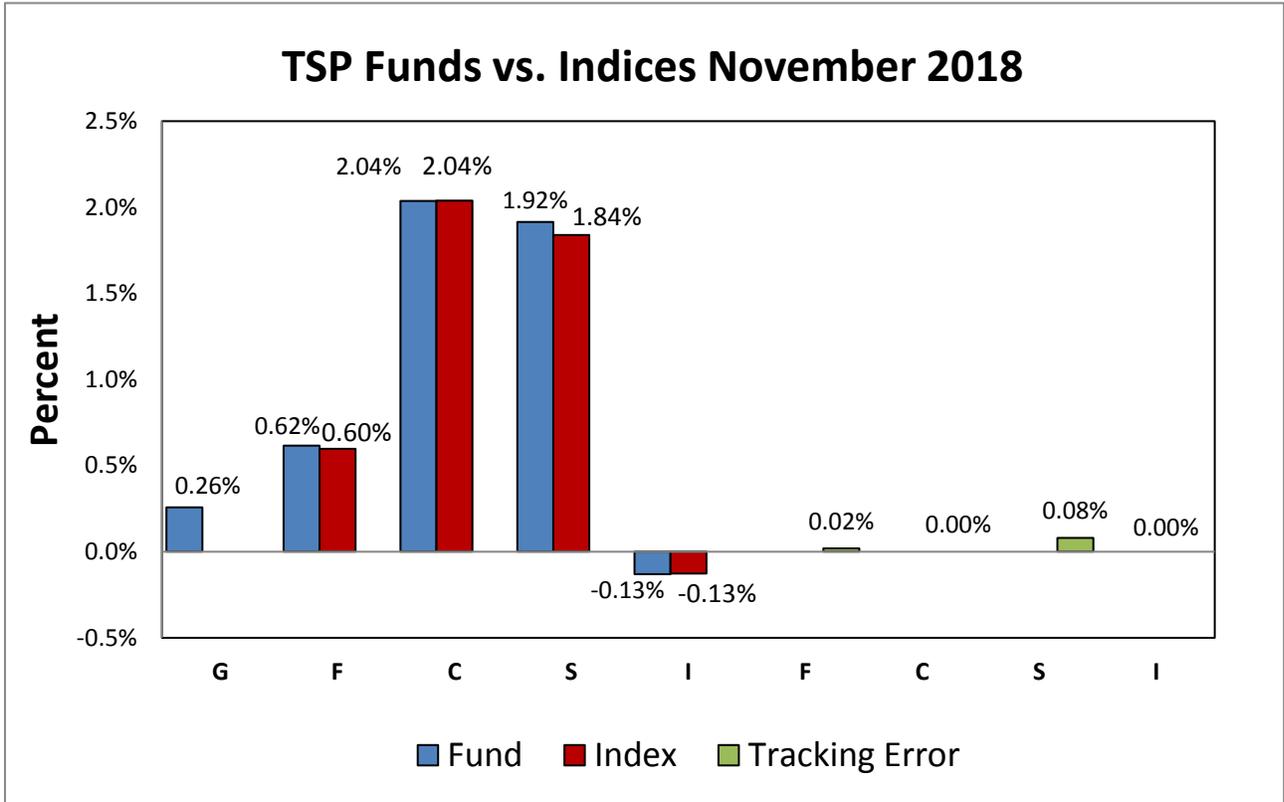
## Trading Costs

	<u>Trading Costs</u>		
<u>F Fund</u>	<u>Dollar Amount</u> <u>Traded</u>	<u>Dollars</u>	<u>Basis</u> <u>Points</u>
November	987,600,839	42,628	0.4
Year-to-Date	9,667,097,863	158,483	0.2
 <u>C Fund</u>			
November	2,511,748,871	1,107,795	4.4
Year-to-Date	31,154,073,140	(6,309,314)	-2.0
 <u>S Fund</u>			
November	1,453,151,985	(241,017)	-1.7
Year-to-Date	19,204,175,898	(6,368,431)	-3.3
 <u>I Fund</u>			
November	1,507,757,730	882,220	5.9
Year-to-Date	18,376,557,960	6,714,266	3.7

\* -- Trading Costs are comprised of commissions, fees, and the difference between where a security is traded and the closing index price.

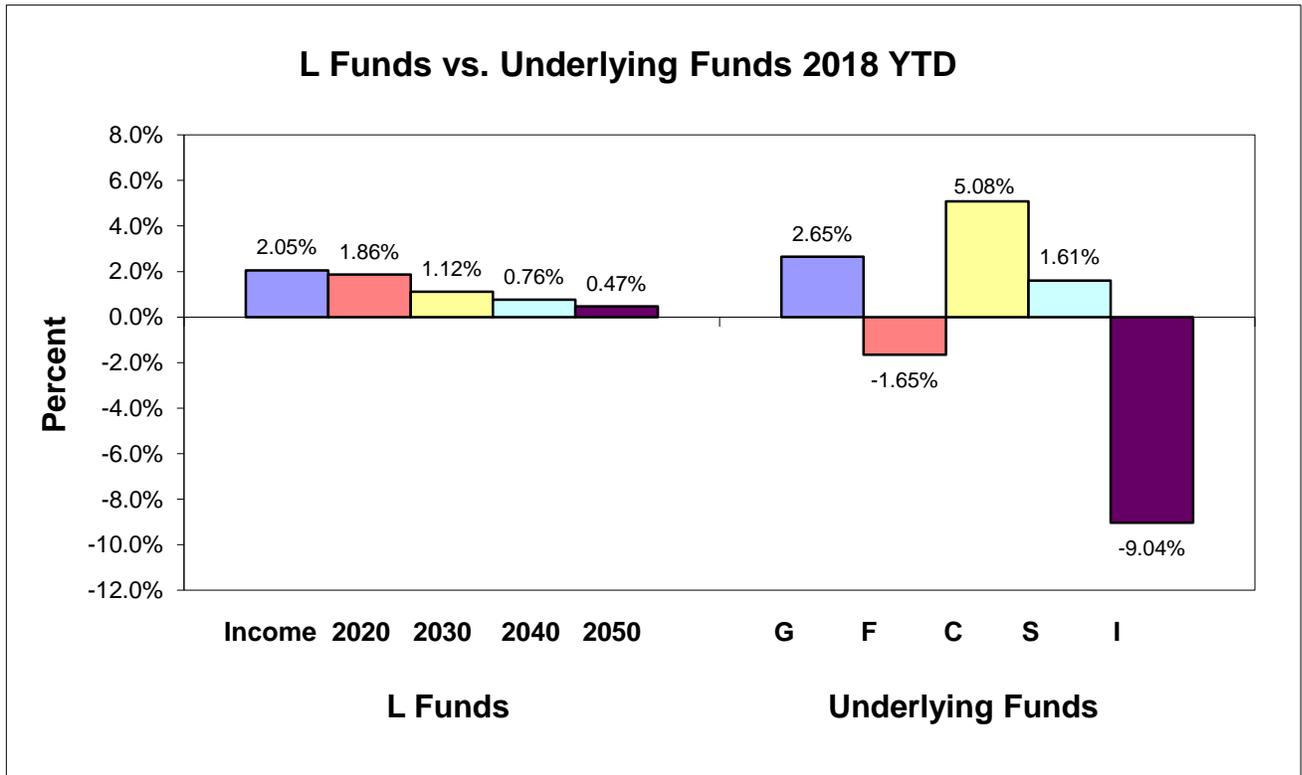
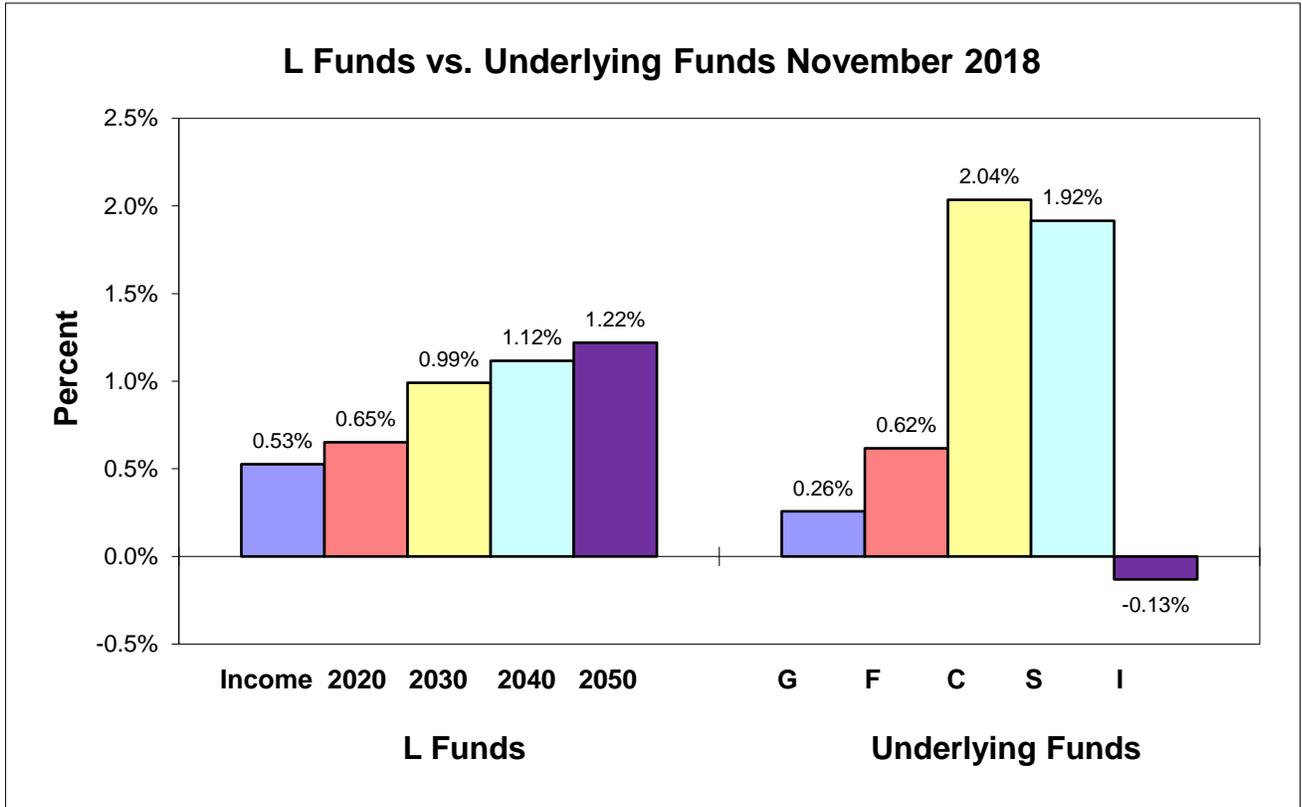
**Performance of TSP Funds Total Returns**

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



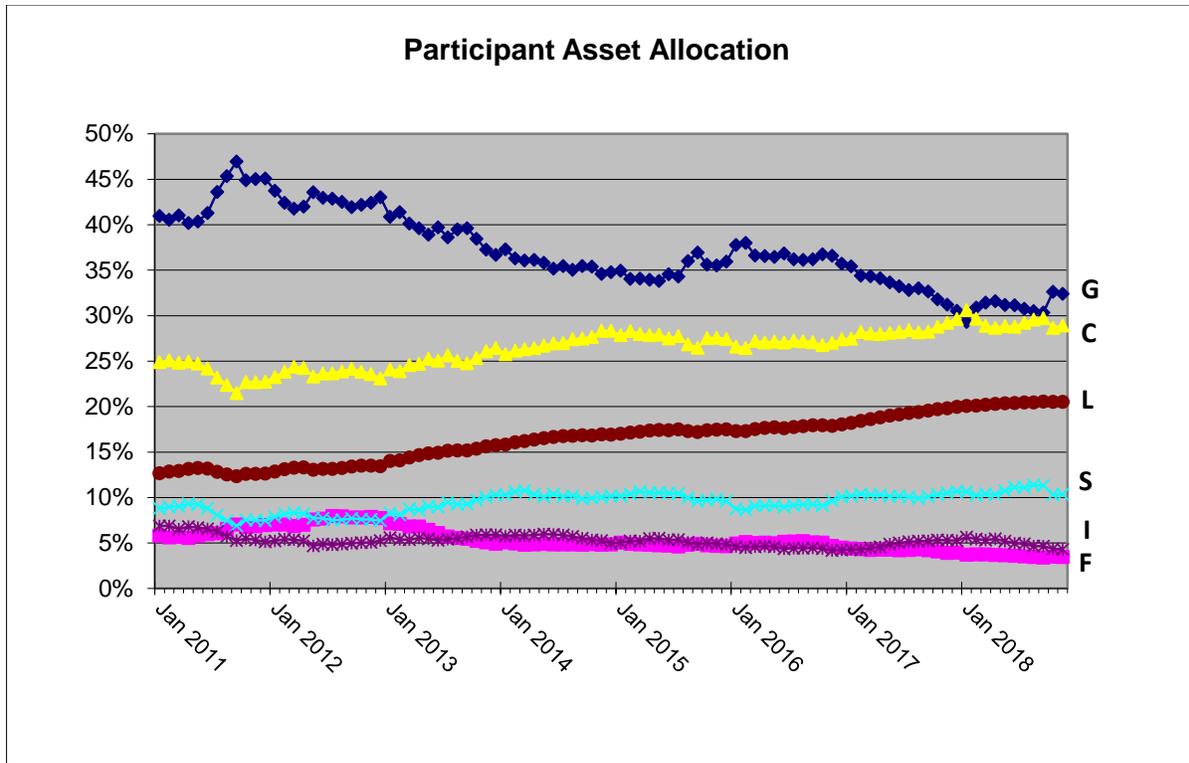
**L Funds**

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.



**THRIFT SAVINGS PLAN MONTHLY INVESTMENT ACTIVITY  
NOVEMBER 2018**

Attachment 1



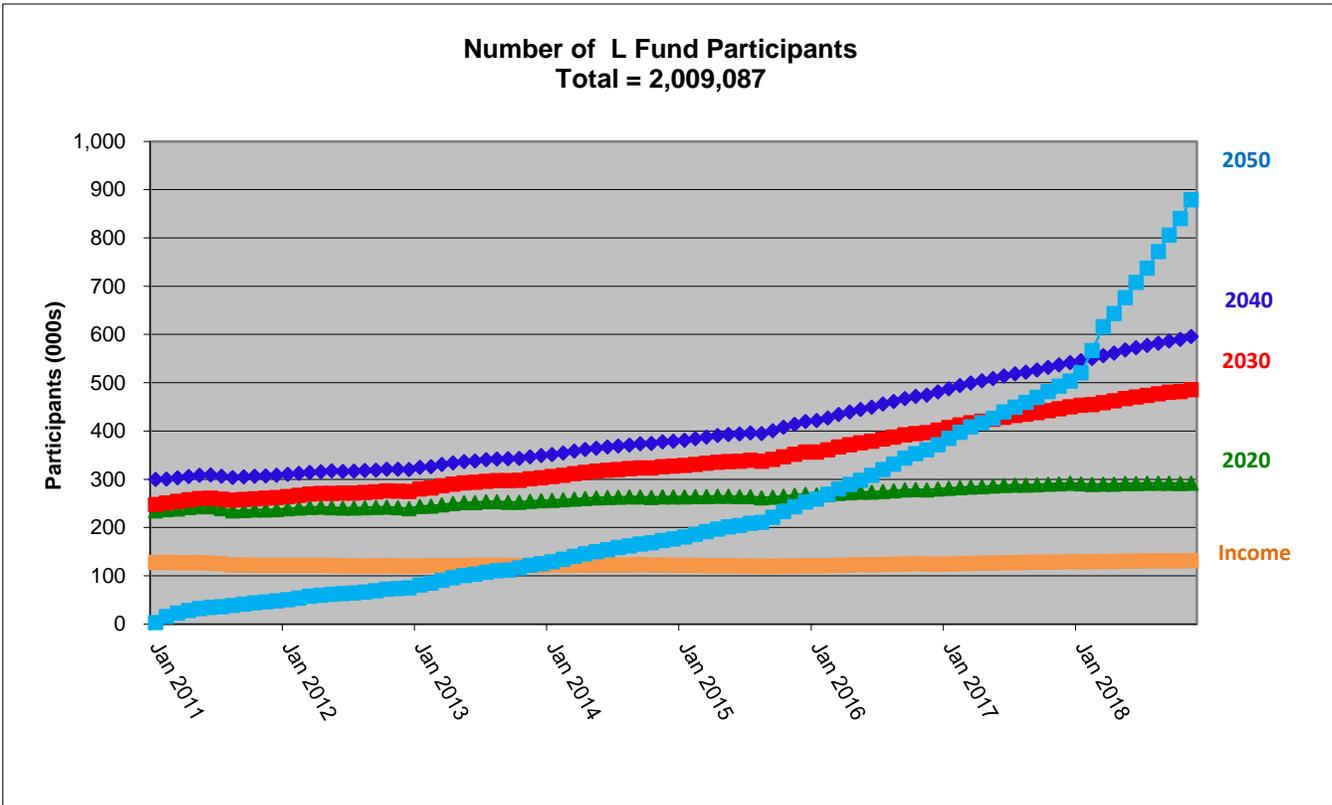
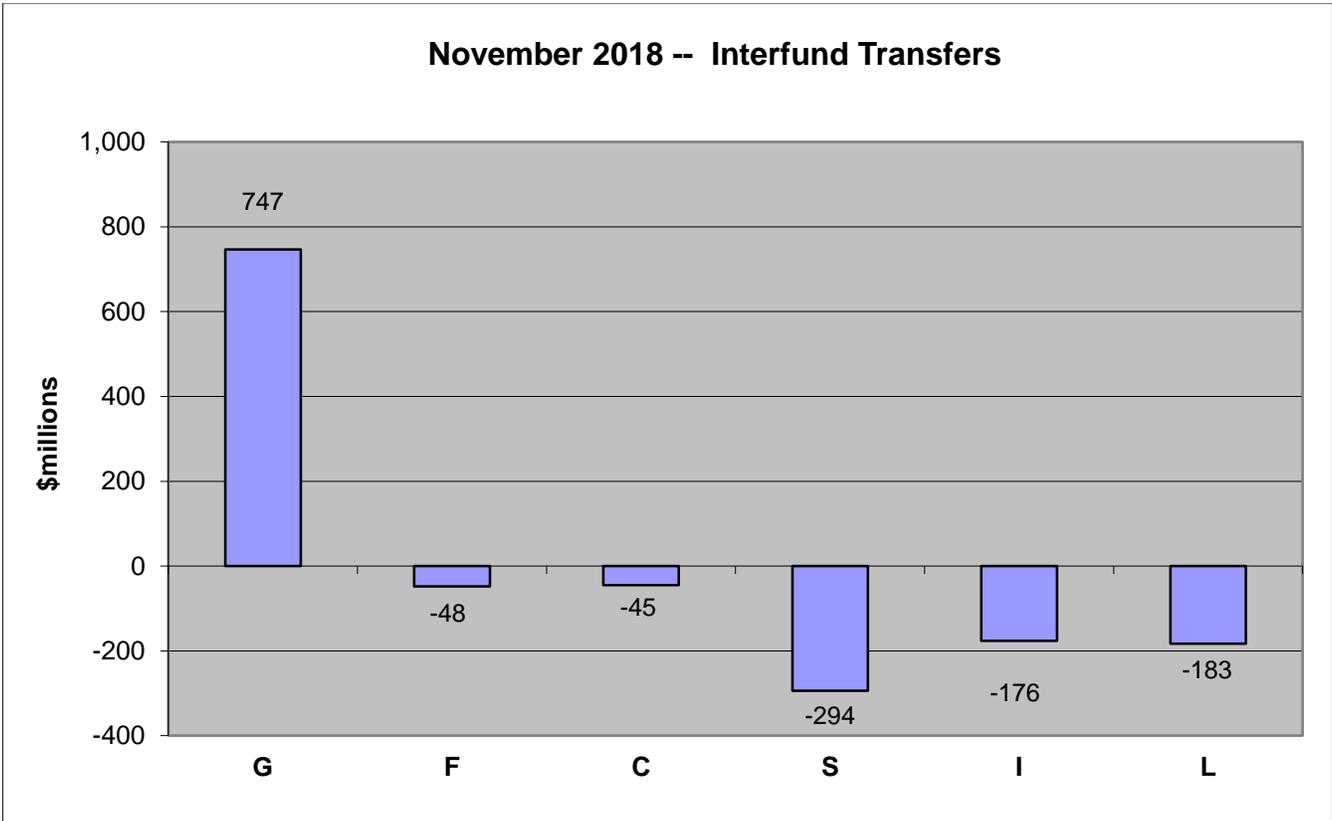
**TSP Assets -- Participant Allocation  
(November 30, 2018)**

<u>Fund</u>	<u>Dollars (Billion USD)</u>	<u>Percent</u>
<b>G Fund</b>	\$182.4	32.5%
<b>F Fund</b>	\$19.4	3.5%
<b>C Fund</b>	\$162.2	28.9%
<b>S Fund</b>	\$58.1	10.3%
<b>I Fund</b>	\$24.1	4.3%
<b>L Fund</b>	\$115.1	20.5%
<b>Total</b>	\$561.4	100%

**TSP Assets -- By Core Funds  
(November 30, 2018)**

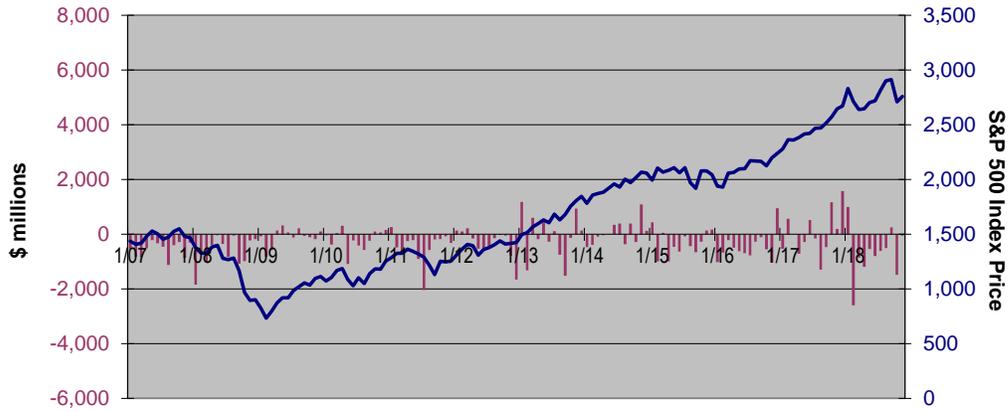
<u>Fund</u>	<u>Dollars (Billion USD)</u>	<u>Percent</u>
<b>G Fund</b>	\$225.8	40.2%
<b>F Fund</b>	\$27.3	4.9%
<b>C Fund</b>	\$196.9	35.1%
<b>S Fund</b>	\$68.3	12.2%
<b>I Fund</b>	\$43.1	7.7%
<b>Total</b>	\$561.4	100%

**THRIFT SAVINGS PLAN MONTHLY INVESTMENT ACTIVITY  
NOVEMBER 2018**

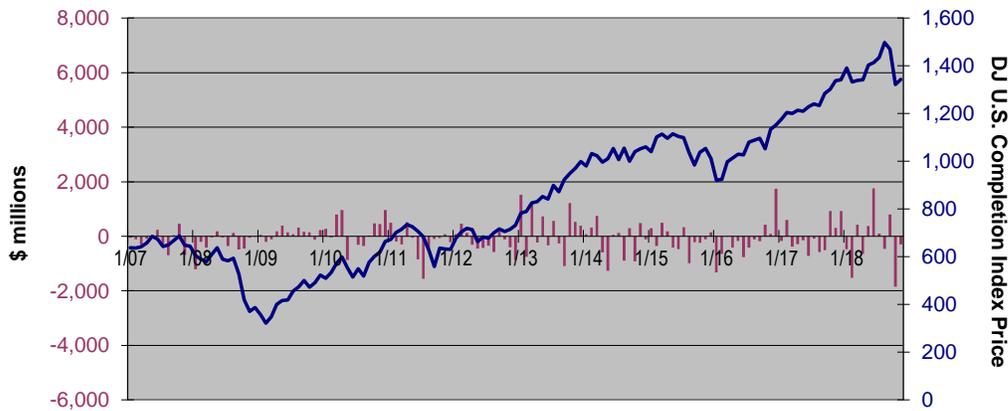


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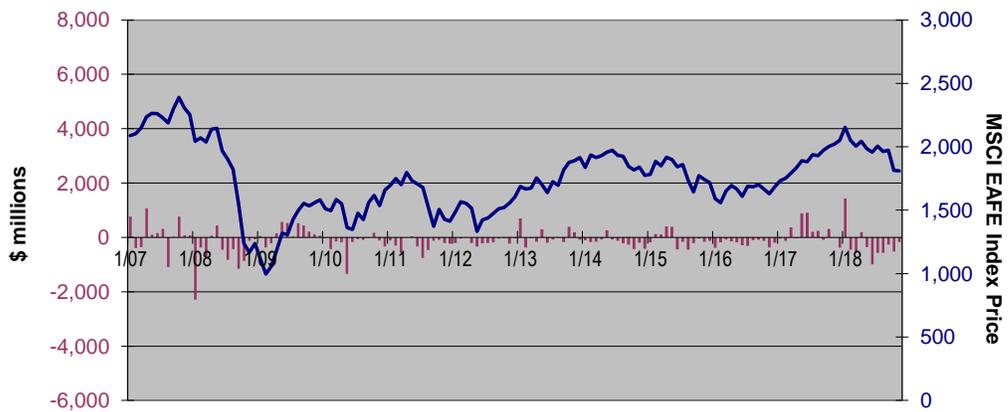
**Monthly Interfund Transfers  
C Fund**



**Monthly Interfund Transfers  
S Fund**

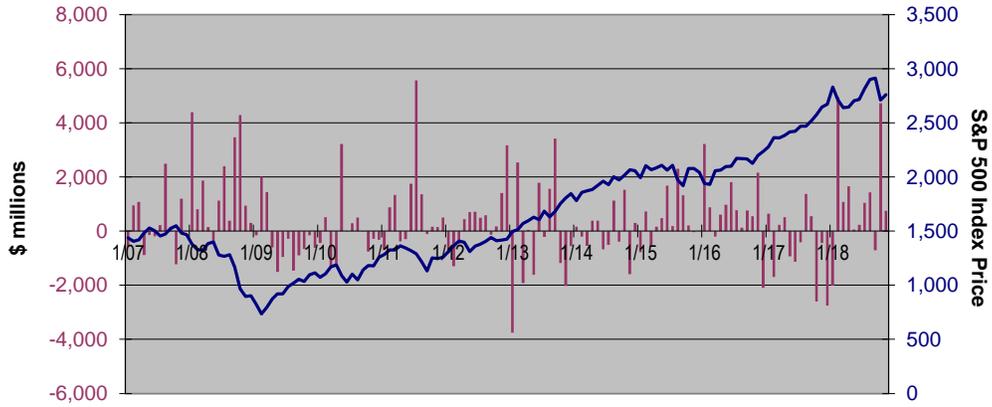


**Monthly Interfund Transfers  
I Fund**

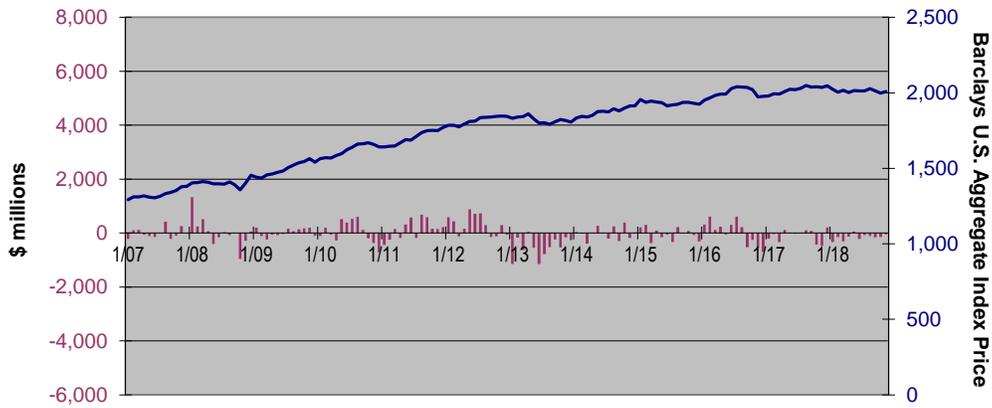


**THRIFT SAVINGS PLAN MONTHLY INVESTMENT ACTIVITY  
NOVEMBER 2018**

**Monthly Interfund Transfers  
G Fund**



**Monthly Interfund Transfers  
F Fund**



**Monthly Interfund Transfers  
L Funds**

