



**2013 Annual Report of the Thrift Savings Plan  
Required by §105 of the  
TSP Enhancement Act of 2009**

**June 30, 2014**

## **Introduction**

In compliance with §105 of the TSP Enhancement Act of 2009, Public Law 111-31, the Federal Retirement Thrift Investment Board (FRTIB) has prepared this annual report which outlines the status of the development and implementation of the mutual fund window in the Thrift Savings Plan (TSP) and provides participant statistics and diversity demographics of the investment manager of the assets in the Thrift Savings Fund.

## **Mutual Fund Window**

In 2009, the FRTIB initiated discussions with the FRTIB Board Members (Board) and the Employee Thrift Advisory Council (ETAC) about the addition of a self-directed mutual fund option to the TSP investment lineup. In the April 2009 Board meeting, the Board deadlocked on the decision to adopt a resolution in support of the mutual fund window (MFW) by a vote of two to two. The fifth Board member was not in attendance. ETAC members were similarly divided in their support for the mutual fund window.

In 2013, under order to reexamine the benefits of and concerns with a MFW, the FRTIB assembled a cross-functional team with representation from its operations, legal, investment, finance, communications, research, and technology offices. The team presented its findings on industry offerings, participant interest, costs, and operational considerations to the Board and ETAC in May 2014. However, there are two additional areas where the TSP wants to do additional research.

A review of withdrawal data leads to a hypothesis that a significant number of TSP participants are leaving the low-cost TSP to move to higher cost IRAs because they are swayed by the financial industry's marketing efforts which promote the benefits of a large menu of investment choices. To determine if this hypothesis is true, the FRTIB is designing a survey to reach participants that execute a post-separation full-withdrawal. Survey results are expected by fall 2014.

Through a MFW, the TSP could offer virtually any fund available in the marketplace. However, the FRTIB is conducting additional research on the impact and implications of screening the number and type of funds that might be made available in the MFW. Screens might be based on the cost or type of funds, however the utilization of such screens may also introduce greater fiduciary risks to the TSP. The additional research is underway and findings will be presented to the Board in the fall of 2014.

## **Investment Manager Diversity Demographics**

The attached report (Appendix A) from TSP investment manager, BlackRock, provides a breakdown of its employee diversity.

## **TSP Participant Behavior and Demographics Report**

The *2013 Participant Behavior and Demographics Report* is attached to this report as Appendix B. This report is an analysis of data extracted from the TSP and enhanced with additional indicative data provided by the Office of Personnel Management.

Appendix A

CO= CT46098  
 U= CT46098

EQUAL EMPLOYMENT OPPORTUNITY  
 2013 EMPLOYER INFORMATION REPORT  
 CONSOLIDATED REPORT - TYPE 2

SECTION B - COMPANY IDENTIFICATION

1. BLACKROCK  
 40 EAST 52ND STREET  
 NEW YORK, NY 10022

2.a. BLACKROCK  
 40 EAST 52ND STREET  
 NEW YORK, NY 10022

SECTION C - TEST FOR FILING REQUIREMENT

1-Y 2-Y 3-Y DUNS NO.:

SECTION E - ESTABLISHMENT INFORMATION

NAICS:

c. Y

SECTION D - EMPLOYMENT DATA

JOB CATEGORIES	HISPANIC OR LATINO		NOT-HISPANIC OR LATINO											OVERALL TOTALS	
			***** MALE *****						***** FEMALE *****						
	MALE	FEMALE	WHITE	BLACK OR AFRICAN AMERICAN	NATIVE HAWAIIAN OR PACIFIC ISLANDER	ASIAN	AMERICAN INDIAN OR ALASKAN NATIVE	TWO OR MORE RACES	WHITE	BLACK OR AFRICAN AMERICAN	NATIVE HAWAIIAN OR PACIFIC ISLANDER	ASIAN	AMERICAN INDIAN OR ALASKAN NATIVE		TWO OR MORE RACES
EXECUTIVE/SR OFFICIALS & MGRS	7	1	443	7	0	45	0	0	91	0	0	14	0	1	609
FIRST/MID OFFICIALS & MGRS	32	10	611	11	0	112	0	2	224	7	0	61	1	4	1075
PROFESSIONALS	64	61	1040	63	3	383	1	26	644	56	2	332	1	13	2689
TECHNICIANS	10	6	234	8	0	240	0	7	82	1	0	90	0	1	679
SALES WORKERS	14	11	295	5	0	31	1	1	107	2	1	27	0	2	497
ADMINISTRATIVE SUPPORT	9	33	44	6	0	9	0	2	187	37	1	42	1	5	376
CRAFT WORKERS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OPERATIVES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABORERS & HELPERS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SERVICE WORKERS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	136	122	2667	100	3	820	2	38	1335	103	4	566	3	26	5925
PREVIOUS REPORT TOTAL	128	121	2633	90	2	772	4	26	1281	100	4	523	3	18	5705

SECTION F - REMARKS

DATES OF PAYROLL PERIOD: 08/15/2013 THRU 08/31/2013

SECTION G - CERTIFICATION

CERTIFYING OFFICIAL: MOLLIE WONG  
 EEO-1 REPORT CONTACT PERSON: MOLLIE WONG  
 EMAIL: mollie.wong@blackrock.com

TITLE: VP - HR COMPLIANCE & RISK MITIGATIO  
 TITLE: VP - HR COMPLIANCE & RISK MITIGATIO  
 TELEPHONE NO: 415.670.7952 CERTIFIED DATE[EST]: 09/09/2013 02:11 PM



Thrift Savings Plan

# Participant Behavior and Demographics



Analysis of 2009 – 2013

## Introduction

This analysis of Thrift Savings Plan (TSP) participant demographics prepared by the Federal Retirement Thrift Investment Board is based on participant data enhanced with additional indicative data from the Office of Personnel Management (OPM). The analysis of calendar year 2013 data is similar to analysis of data conducted in previous years.

As with the 2012 report, the 2013 analysis will focus solely on participants in FERS, the Federal Employee Retirement System, as the participant population in the Civil Service Retirement System (CSRS) is a very small and declining segment of the TSP. Information from this analysis provides insight on demographics, investment behaviors and how plan design changes may influence participation and contribution behaviors. Finally, this analysis helps us identify trends with the participant usage of benefit options.

## Background

The Federal Retirement Thrift Investment Board is an independent Federal agency that was established to administer the Thrift Savings Plan (TSP) under the Federal Employees' Retirement System Act of 1986 (See 5 U.S.C. §§ 8351; 8401 et seq.). Similar to the type of savings and tax benefits that many private corporations offer their employees under I.R.C. §401(k) plans, the TSP provides Federal civilian employees and members of the uniformed services the opportunity to save for additional retirement security. The Agency's mission is to act solely in the interest of its participants and beneficiaries.

TSP participants can invest their employee and employer contributions in the following core funds:

- Government Securities Investment Fund (*G Fund*)
- Fixed Income Index Investment Fund (*F Fund*)
- Common Stock Index Investment Fund (*C Fund*)
- Small Cap Stock Index Investment Fund (*S Fund*)
- International Stock Index Investment Fund (*I Fund*)

In addition to these indexed core funds, participants may also invest in five Lifecycle Funds (*L Funds*). The L Funds are custom target-date funds invested exclusively in the G, F, C, S, and I Funds.

During the period covered by this report, the TSP underwent three major plan design changes. The implementation of immediate contributions occurred in June 2009, automatic enrollment began in August 2010, and the acceptance of Roth contributions commenced in May 2012. The impact of these changes on participant behavior will be discussed in this analysis. It should be noted that this is the first report to delve into participant behaviors associated with Roth contributions as there was not sufficient experience with Roth to include any observations in the 2012 report.

## Data Collection and Methodology

This report is based on data extracted from the TSP recordkeeping system, which was enhanced with information from OPM. In each year covered by this report, the TSP provided extract data on the accounts of all TSP participants identified as active civilian Federal employees. OPM enhanced the data by comparing it to their database of Executive Branch and Postal Service employees and added data on participants' annual salary, length of Federal service, employment (full-time vs. part-time) status, gender, race and ethnicity, and education.

Not all records for participants on the TSP extract can be matched with OPM data. In 2013, a total of nearly 2.6 million participants were identified by the TSP, and OPM returned data on approximately 2.4 million employees. A similar ratio of total records extracted to records matched was seen in other years covered by this report. The inability to match some TSP records to OPM data occurs when OPM or TSP data is incomplete. Additionally, since OPM does not collect data on employees of the Legislative and Judicial Branches, OPM is not able to match against those records. Part-time or intermittent employees are identified in the dataset; however, they are excluded from the analysis because their hourly work schedule (and therefore their actual compensation) is not known. While the TSP maintains records for a large number of retired or otherwise separated participants, such participants are not active and are therefore not considered within the context of this report. Lastly as previously noted, this report focuses solely on the FERS population, and records for CSRS participants were excluded from the analysis. See the table in Appendix A for a summary of the demographics of fulltime FERS participants included in this analysis. The tables in Appendices B and C provide additional demographic summaries of fulltime FERS participants based on their contributing or non-contributing status.

In this report, salaries are shown in quintiles. The first quintile represents the 20% of all records in the lowest annual salary band; the fifth quintile represents the 20% of records in the highest salary band. Data on salary ranges for the quintiles in each year can be found in Appendix D.

In summary, the analysis provided in this report is subject to the following limitations:

The exclusion of TSP accounts for employees of the Legislative and Judicial Branches may modestly distort the findings.

The exclusion of TSP accounts that cannot be matched with OPM data may modestly distort the findings.

The exclusion of TSP accounts for part-time and intermittent workers is likely to have a more meaningful impact on the findings. Since this group is likely to participate and contribute at lower rates than full-time employees, the findings may marginally overestimate the rates of participation and deferral of the total TSP participant base.

Employees' actual deferral rates are not included in the TSP or OPM databases. Therefore, an approximation of annualized deferral rate is calculated by comparing the total employee contributions to the annual salary rate for each calendar year.

## Analysis

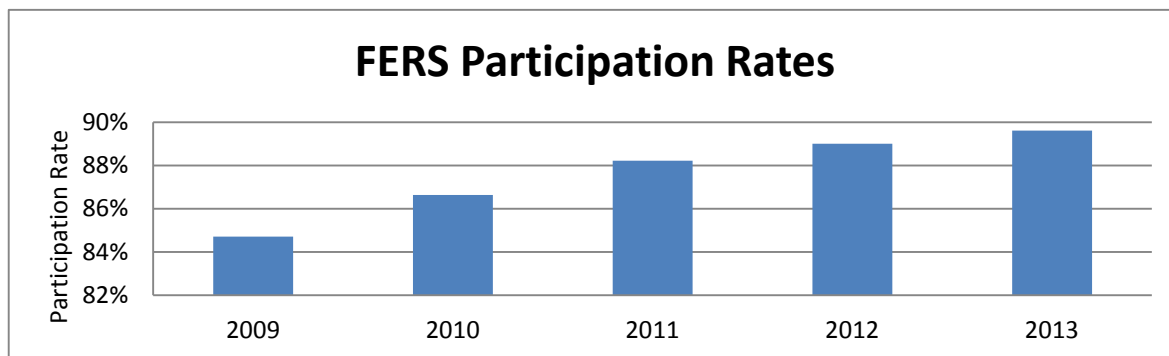
The following sections of this report examine the behaviors of FERS participants across a five-year timeframe ending December 31, 2013 and through the lens of six demographic filters – age, tenure, salary, gender, race and ethnicity, and education. The exhibits and narratives display the relationships between these demographic factors and these participant behaviors:

participation and automatic enrollment; contribution deferral rates; investment allocation and activity; and loan and hardship withdrawal usage.

## Plan Participation

FERS participation was at a five-year high of 89.6% by the end of 2013. Figure 1 illustrates the steady improvement in the participation rate since 2009 when participation was down due to the lingering impact of the 2008 economic downturn and the implementation of immediate contributions in June 2009. Prior to 2009, new employees had to wait a period of six to twelve months before becoming eligible to receive agency 1% automatic and matching contributions. In June 2009, employees became eligible to receive these contributions immediately upon hire. As a result, this change increased the denominator (the number of employees who were eligible to participate in the TSP) but did not have a similar impact on the numerator – the number of individuals deferring into the Plan.

Figure 1



The economic rebound and automatic enrollment contributed significantly to the improvement in participation rates in 2010, with an almost 2% gain – the same year that automatic enrollment was instituted. Gains in participation of nearly 1% followed in 2011 and 2012, with a slightly lower increase in 2013. Automatic enrollment provides that new employees automatically have 3% of their salary deferred into the G Fund unless there is an active election not to participate in the Plan. Automatic enrollment has meant that not only do participants immediately receive the Agency 1% contribution, but they also start deferrals and receive matching contributions immediately upon hire.

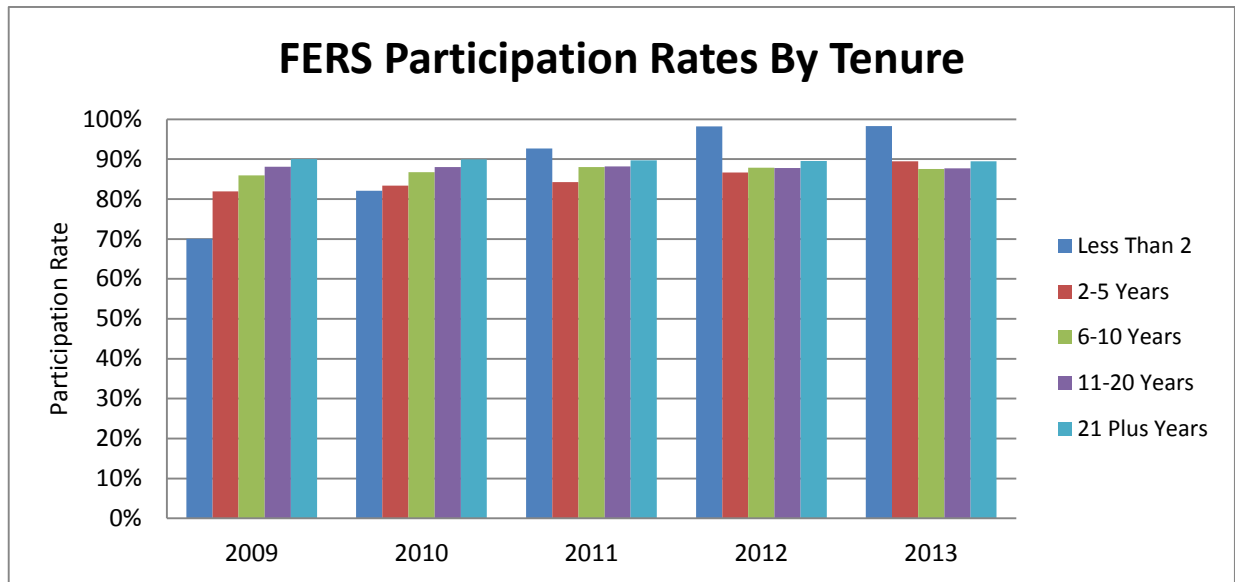
When examining participation by tenure bands, the impact of automatic enrollment on participation becomes even more evident. Historically, participation has been lowest among the newest employees, those with two or less years of employment, with rates of participation gradually increasing as the length of tenure increased. However, with the introduction of automatic enrollment in August 2010, this trend has strongly shifted and now the shortest-tenured employees have the highest participation rates. As shown in figure 2, participation among the shortest-tenured was the lowest at 70.0% in

*After automatic enrollment, those with less than two-years of tenure now have the highest rate of participation at **98.3%***



2009 while the longest-tenured participated at a rate of 90.0%. By 2013, those with less than two-years of tenure participated at a rate of 98.3% - the highest rate of participation among all tenure bands and almost 9% higher than the band with second highest participation rate.

Figure 2



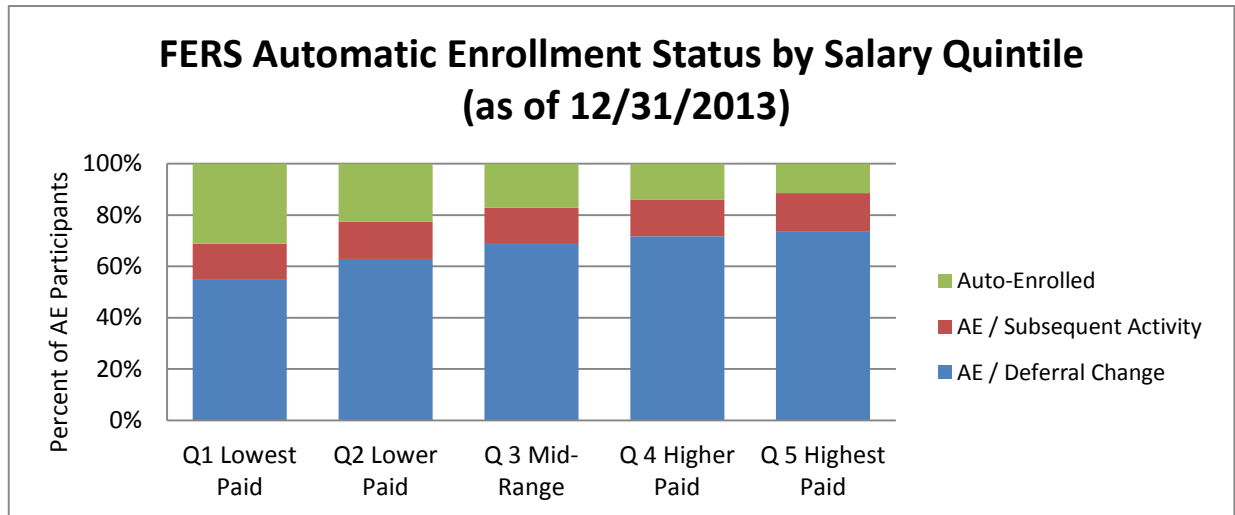
It appears that automatic enrollment may have had a similar impact on the youngest and lowest-paid participants as with the shortest-tenured participants. In 2009, the participation rate for the under age 29 cohort was the lowest among all age cohorts at 78%, while the age 60-69 cohort had the highest participation at 88.4%. By 2013, the youngest cohort had surpassed all other age cohorts and had the highest rate of participation – 93.3%. In 2009 and 2010, participation rates among the lowest-paid quintile trailed that of the highest paid by approximately 20%. By 2013, the difference between the two quintiles was reduced to less than 12%. When examining participation by race and ethnicity cohorts, participation improved the most among black and multi-racial participants during this report period. However, participation among blacks at 83.3% lags significantly behind Asians who have the highest participation rate of 95.0%. It should be noted that males and females have consistently participated at nearly the same rate for each year in this reporting period. See Table 1 below:

Table 1

Annual FERS Participation Rates by Demographic Cohorts					
	2009	2010	2011	2012	2013
<b>Age</b>					
<= 29	78.0%	83.9%	89.1%	91.7%	93.3%
30 – 39	83.3%	85.7%	88.2%	89.5%	90.5%
40 – 49	84.9%	86.1%	87.1%	87.6%	88.0%
50 – 59	87.1%	88.0%	88.5%	88.7%	88.9%
60 – 69	88.4%	89.0%	89.1%	89.1%	89.1%
70+	86.6%	87.1%	87.3%	87.5%	87.8%
<b>Tenure</b>					
Less than 2 years	70.0%	82.1%	92.6%	98.2%	98.3%
2-5 years	81.9%	83.3%	84.2%	86.7%	89.5%
6-10 years	85.9%	86.8%	88.0%	87.9%	87.6%
11-20 years	88.1%	88.0%	88.2%	87.8%	87.7%
21+ years	90.0%	89.9%	89.7%	89.5%	89.5%
<b>Salary Quintile</b>					
Q1 Lowest Paid	71.1%	76.2%	80.6%	82.7%	84.3%
Q2 Lower Paid	82.3%	83.4%	83.8%	83.6%	83.8%
Q3 Mid-Range	86.5%	87.3%	88.3%	89.0%	89.4%
Q4 Higher Paid	89.9%	91.3%	92.4%	92.8%	93.1%
Q5 Highest Paid	94.4%	95.1%	95.4%	95.6%	95.7%
<b>Gender</b>					
Female	84.7%	86.6%	88.0%	88.6%	89.1%
Male	85.0%	86.7%	88.2%	88.9%	89.3%
<b>Race and Ethnicity</b>					
American Indian or Native Alaskan	79.3%	82.0%	84.2%	85.3%	85.7%
Asian or Other Pacific Islander	90.3%	92.2%	93.7%	94.5%	95.0%
Black or African American	76.7%	79.6%	81.9%	82.6%	83.3%
White	87.0%	89.1%	90.8%	91.7%	92.3%
Hispanic Or Latino	84.0%	86.0%	88.0%	88.9%	89.4%
Multi-Racial	77.7%	84.1%	88.2%	90.0%	91.0%
Unknown	84.6%	84.6%	84.2%	83.9%	84.1%
<b>Education</b>					
Without High School Diploma	73.7%	73.7%	76.7%	77.4%	77.8%
High School Diploma	78.1%	78.1%	83.2%	84.5%	85.0%
Some College or Training	82.4%	82.4%	86.3%	87.1%	87.7%
Bachelor's Degree	90.4%	90.4%	93.1%	93.7%	94.0%
Post-Bachelor's Education/Degree	91.6%	91.6%	94.6%	95.1%	95.5%

While automatic enrollment has significantly increased participation among the newly hired, it has not, thus far, resulted in a significant increase in the number of participants who remain “unengaged” or otherwise make no investment/deferral election. The vast majority of auto-enrolled participants are remaining in the Plan, and of this population, 63.2% are actively making deferral rate changes, while others are showing signs of life by having made interfund transfers or other transactions. However, as shown in figure 3, those who remain in the auto-enrolled status (no deferral change or investment activity) are mostly in the lowest salary quintiles.

Figure 3



### Contribution Deferral Rates

The FERS contribution deferral rate dropped to 8.2% in 2013 after experiencing a one percent increase in 2012 as shown in figure 4. (The FERS deferral rate includes Roth, traditional and catch-up contributions). While 63.2% of automatically-enrolled participants change their deferrals from the 3% default rate, automatic enrollment, nevertheless, appears to have had a dampening effect on deferral rates as rates have consistently been below the 2009 high.

Figure 4

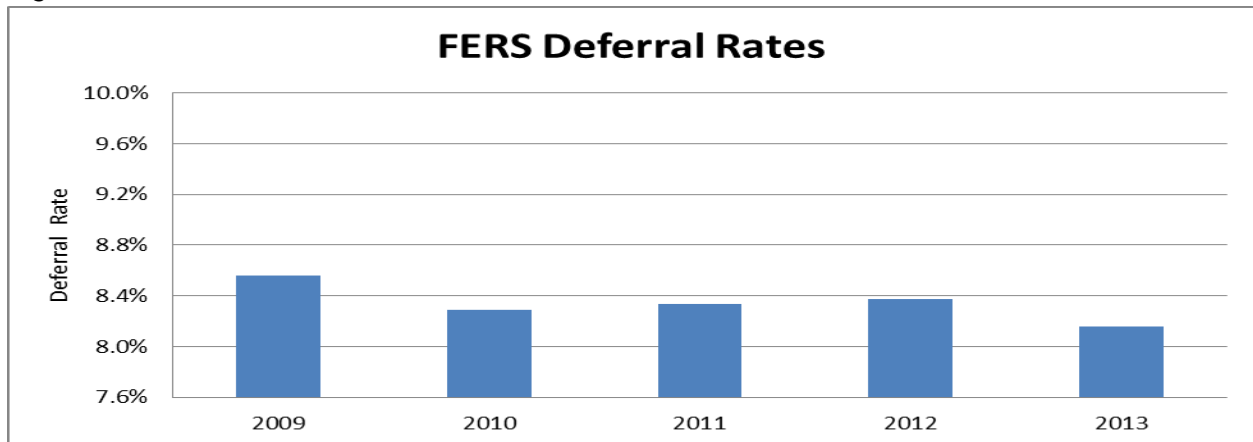
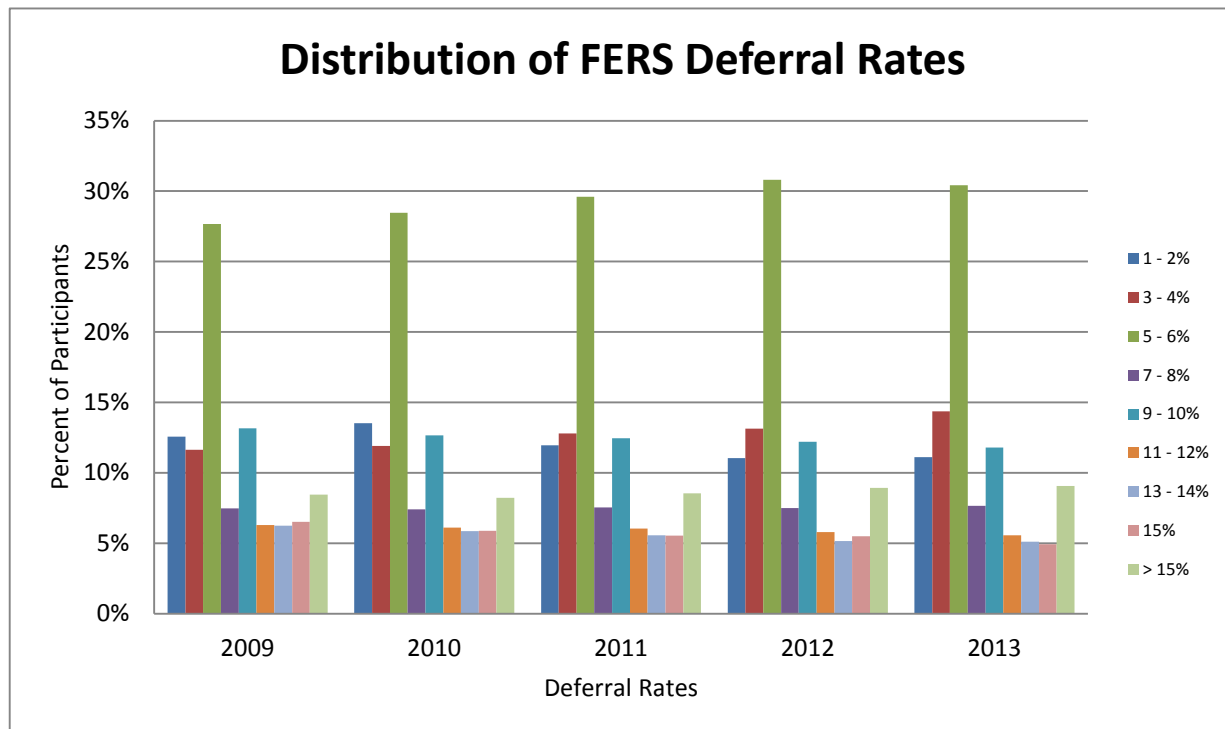


Figure 5 illustrates the power of plan design on participant behavior. FERS participants receive dollar-for-dollar matching contributions on the first 3% of pay and 50 cents on the dollar on the next 2%. The full match is achieved with a 5% contribution. Consequently, deferral rates aggregate in the 5-6% range, with 30.4% of TSP contributors being in this range in 2013. Of significant note, 25.5% of participants are not receiving the full matching contribution as they are contributing less than 5%.

Figure 5



As expected, the lowest-paid participants are deferring the least – 4.6% less than the highest paid. See table 2. However, all salary quintiles had slight dips in 2013 from their 2012 deferral rates. Also as expected, the youngest and shortest-tenured participants have the lowest deferral rates with deferrals steadily increasing with age and tenure. Deferral rates also increase in correlation with education level. During each year in this report period, males have contributed about six-tenths of one percent more than females. Deferral rates among blacks at 5.8%, significantly lags behind Asians who have the highest deferral rate of 9.8%, whites at 8.0% and Latinos at 7.4%.

*Participants with less than two years of tenure had an average deferral rate of 3.8% in 2013. In 2009, their deferral rate was 4.2%. They are the only tenure cohort that is not, on average, receiving the full match.*

Table 2

Annual FERS Deferral Rates by Demographic Cohorts					
	2009	2010	2011	2012	2013
<b>Age</b>					
<= 29	4.9%	4.7%	5.0%	5.2%	4.9%
30 – 39	6.4%	6.1%	6.2%	6.3%	6.1%
40 – 49	7.7%	7.4%	7.4%	7.4%	7.1%
50 – 59	9.4%	9.1%	9.2%	9.2%	9.0%
60 – 69	10.8%	10.5%	10.5%	10.5%	10.3%
70+	12.2%	11.9%	11.8%	11.9%	11.6%
<b>Tenure</b>					
Less than 2 years	4.2%	3.9%	4.2%	4.1%	3.8%
2-5 years	6.7%	6.4%	6.6%	6.6%	6.3%
6-10 years	8.0%	7.8%	7.9%	7.9%	7.6%
11-20 years	8.8%	8.6%	8.8%	8.7%	8.6%
21+ years	9.5%	9.4%	9.4%	9.5%	9.4%
<b>Salary Quintile</b>					
Q1 Lowest Paid	5.4%	5.1%	5.2%	5.4%	5.1%
Q2 Lower Paid	7.3%	7.3%	7.5%	7.5%	7.4%
Q3 Mid-Range	7.9%	7.6%	7.5%	7.5%	7.3%
Q4 Higher Paid	8.7%	8.4%	8.7%	8.8%	8.6%
Q5 Highest Paid	9.9%	9.7%	9.7%	9.8%	9.7%
<b>Gender</b>					
Female	7.6%	7.4%	7.4%	7.5%	7.4%
Male	8.3%	8.0%	8.1%	8.1%	8.0%
<b>Race and Ethnicity</b>					
American Indian or Native Alaskan	6.5%	6.2%	6.2%	6.2%	6.1%
Asian or Other Pacific Islander	10.0%	9.6%	9.7%	9.9%	9.8%
Black or African American	5.9%	5.7%	5.8%	5.9%	5.8%
White	8.3%	8.0%	8.1%	8.2%	8.0%
Hispanic Or Latino	7.5%	7.3%	7.5%	7.6%	7.4%
Multi-Racial	6.4%	6.5%	6.7%	6.9%	6.7%
Unknown	8.1%	8.1%	8.1%	8.0%	7.9%
<b>Education</b>					
Without High School Diploma	6.0%	5.8%	5.9%	5.9%	5.7%
High School Diploma	6.9%	6.6%	6.7%	6.8%	6.5%
Some College or Training	7.4%	7.1%	7.1%	7.2%	6.9%
Bachelor's Degree	8.6%	8.2%	8.4%	8.5%	8.3%
Post-Bachelor's Education/Degree	9.1%	8.7%	8.8%	8.9%	8.8%

Roth TSP was introduced in May 2012. With Roth TSP, participants make contributions from after-tax dollars, and their earnings on these contributions are tax-free at withdrawal as long as certain IRS requirements are met. While the majority of participants continue to defer only traditional (pre-tax) contributions, deferrals to Roth TSP are increasing.

For those contributing to Roth, their average deferrals were 4.4% as opposed to the average traditional deferral of 7.7%. (Roth and traditional average deferral rates do not include catch-up contributions which are reflected in the deferral rates shown in Figures 4 and 5.) Deferral rates are highest among older participants, as well as the most-tenured and highest-paid.

## 2013 FERS Deferral Rates

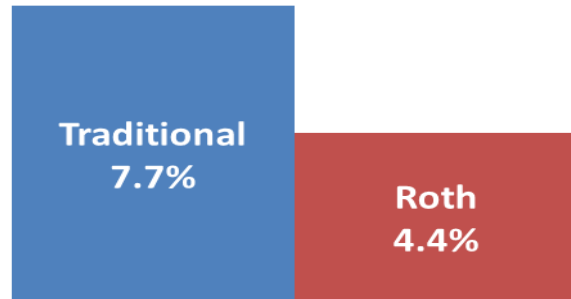


Table 3

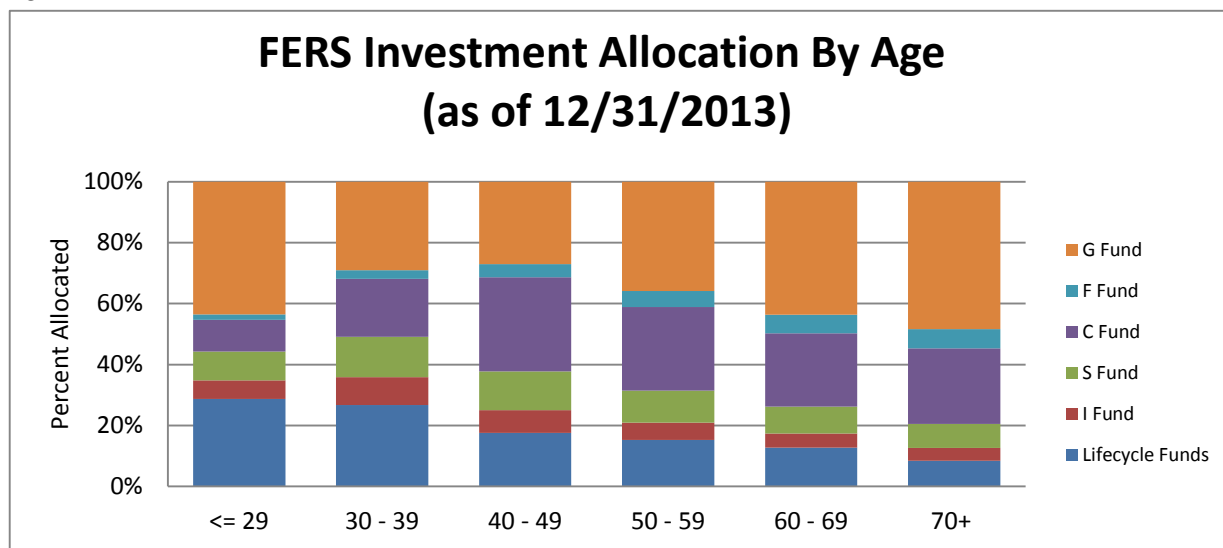
FERS Traditional and Roth Deferral Rates by Demographic Cohorts		
	Traditional	Roth
<b>Age</b>		
<= 29	4.6%	3.5%
30 – 39	5.8%	3.5%
40 – 49	7.0%	3.5%
50 – 59	8.4%	4.2%
60 – 69	9.5%	5.6%
70+	10.6%	6.1%
<b>Tenure</b>		
Less than 2 years	3.4%	3.1%
2-5 years	6.0%	3.8%
6-10 years	7.2%	3.8%
11-20 years	8.2%	4.0%
21+ years	8.9%	4.2%
<b>Salary Quintile</b>		
Q1 Lowest Paid	5.0%	3.0%
Q2 Lower Paid	7.2%	3.7%
Q3 Mid-Range	7.0%	3.7%
Q4 Higher Paid	8.2%	4.1%
Q5 Highest Paid	9.1%	4.4%

## Investment Allocation and Inactivity

In Figure 6, we note that allocations to the G Fund appropriately increase as the age of the TSP’s population increases. This behavior is consistent with the expectation that participants shift their investment allocation toward the relative safety of income producing assets as they approach retirement age. The noteworthy exception to this observation is in the grouping of participants aged 29 and under. In this age cohort, we note that participants invest a disproportionate percentage (43.6%) of their accounts in the G Fund, probably as a result of the default investment option being the G Fund.

*The youngest participants who have the longest time horizon to reap the benefits of compounding returns have **43.6%** of their assets invested in the G Fund.*

Figure 6



We note that the shortest-tenured participants, those with less than two years of tenure, have the highest allocation to the G Fund, approximately 57%. Although we previously noted that the majority of automatically enrolled participants changed their contribution deferral rate, this concentration in the G Fund suggests that these participants are not “engaging” and shifting their investments away from the default allocation of the G Fund. Further, the lowest-paid participants have approximately 55% allocated to the G fund as compared to the highest paid who allocated only 27.5% to the G Fund. Females had a slightly higher allocation to the G Fund at 36.4% as compared to males at 32.8%. Additionally, blacks are allocated 43.3% to the G Fund, well above the allocation levels Asians at 32% and whites at 30%. See Table 4.

When examining L Fund allocations, the two youngest age cohorts had the highest level of usage at 28.7% and 26.7% while the two oldest age cohorts had L Fund allocations of 12.7% and 8.4%. We also want to note that L Fund usage is highest among the 2-5 years tenure cohort (26.4%) and the 6-10 years group (24.9%). The majority of the participants in these two cohorts began Federal service after the implementation of the L Funds in 2005. Usage of the L Funds drops off somewhat with the less than two years cohort (19.4%), where the impact of auto-enrollment and inertia are likely factors. Males and females had nearly identical allocations to the L Funds at just under 17%. See Table 4.

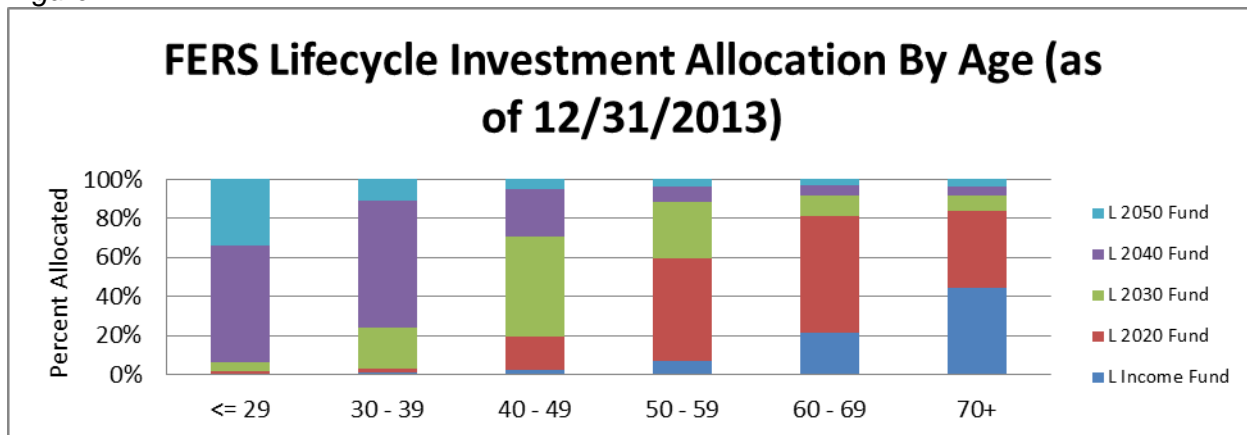
Table 4

Annual Investment Allocations by Demographic Cohorts						
	G Fund	F Fund	C Fund	S Fund	I Fund	L Funds
<b>Age</b>						
<= 29	43.6%	1.7%	10.4%	9.5%	6.1%	28.7%
30 – 39	29.1%	2.8%	19.0%	13.2%	9.1%	26.7%
40 – 49	27.1%	4.3%	30.9%	12.8%	7.5%	17.5%
50 – 59	35.9%	5.2%	27.5%	10.5%	5.6%	15.3%
60 – 69	43.7%	6.1%	24.0%	8.8%	4.7%	12.7%
70+	48.4%	6.2%	24.8%	7.9%	4.2%	8.4%
<b>Tenure</b>						
Less than 2 years	57.2%	2.3%	10.2%	6.9%	3.9%	19.4%
2-5 years	43.9%	3.0%	11.6%	9.6%	5.6%	26.4%
6-10 years	35.2%	3.4%	15.2%	12.7%	8.6%	24.9%
11-20 years	29.2%	5.3%	30.1%	12.3%	7.3%	15.8%
21+ years	35.5%	5.1%	29.7%	10.2%	5.3%	14.1%
<b>Salary Quintile</b>						
Q1 Lowest Paid	54.5%	3.6%	16.8%	7.5%	4.9%	12.7%
Q2 Lower Paid	45.3%	5.0%	25.5%	8.3%	4.8%	11.0%
Q3 Mid-Range	40.3%	4.6%	23.0%	10.1%	6.0%	15.9%
Q4 Higher Paid	33.2%	4.5%	24.2%	12.1%	7.0%	19.0%
Q5 Highest Paid	27.5%	5.1%	30.7%	12.1%	6.7%	17.9%
<b>Gender</b>						
Female	36.4%	5.3%	26.6%	9.4%	5.7%	16.6%
Male	32.8%	4.6%	27.2%	12.1%	6.7%	16.7%
<b>Race and Ethnicity</b>						
American Indian or Native Alaskan	41.5%	4.4%	24.0%	10.2%	5.6%	14.3%
Asian or Other Pacific Islander	32.0%	4.7%	26.7%	13.4%	7.8%	15.5%
Black or African American	43.3%	4.7%	23.7%	9.5%	5.9%	12.9%
White	30.0%	4.8%	27.9%	11.6%	6.6%	19.1%
Hispanic Or Latino	36.1%	4.0%	24.3%	12.4%	7.3%	15.8%
Multi-Racial	33.6%	4.3%	22.0%	12.7%	7.5%	19.8%
Unknown	43.7%	5.3%	26.9%	8.7%	4.8%	10.5%
<b>Education</b>						
Without High School Diploma	51.4%	4.0%	21.9%	7.8%	4.7%	10.3%
High School Diploma	41.1%	3.9%	21.6%	10.7%	6.5%	16.0%
Some College or Training	39.4%	4.3%	23.4%	11.0%	6.2%	15.8%
Bachelor's Degree	29.3%	4.6%	28.7%	12.3%	6.8%	18.3%
Post-Bachelor's Education/Degree	27.6%	5.4%	29.3%	11.6%	6.8%	19.4%



Of the participants utilizing the Lifecycle (L) Funds, the allocation is largely as we would hope. Those in the age 29 and under cohort were appropriately taking advantage of the L2040 and L2050 Funds. Participants who would likely retire between 2025 and 2035 (the 40-49 age group) were in L2030 and L2040 Funds. The age 50-59 cohort was aggregated in the L2020 and L2030 Funds. Participants aged 60-69 were solidly investing in the L2020, while those 70 and over had the highest allocation in the L Income Fund. See Figure 7.

Figure 7



The L Funds' strategy is to invest in an appropriate mix of the G, F, C, S, and I Funds for a particular time horizon. The investment mix of each L Fund becomes more conservative as its target date approaches. Thus, the participant only needs to invest in one L Fund in order to achieve diversification among the core funds. As shown in Figure 8, the use of one L Fund is most common with the two youngest age cohorts – 6.6% for those age 29 and under and 7.4% for those age 30 to 39. While the percent of participants who invest solely in the F, C, S, and I Funds is minor, all age cohorts have a significant percentage of participants investing solely in the G Fund. In fact, the majority (59.7%) of the under age 29 cohort is invested solely in the G Fund. See Figure 8.

Figure 8

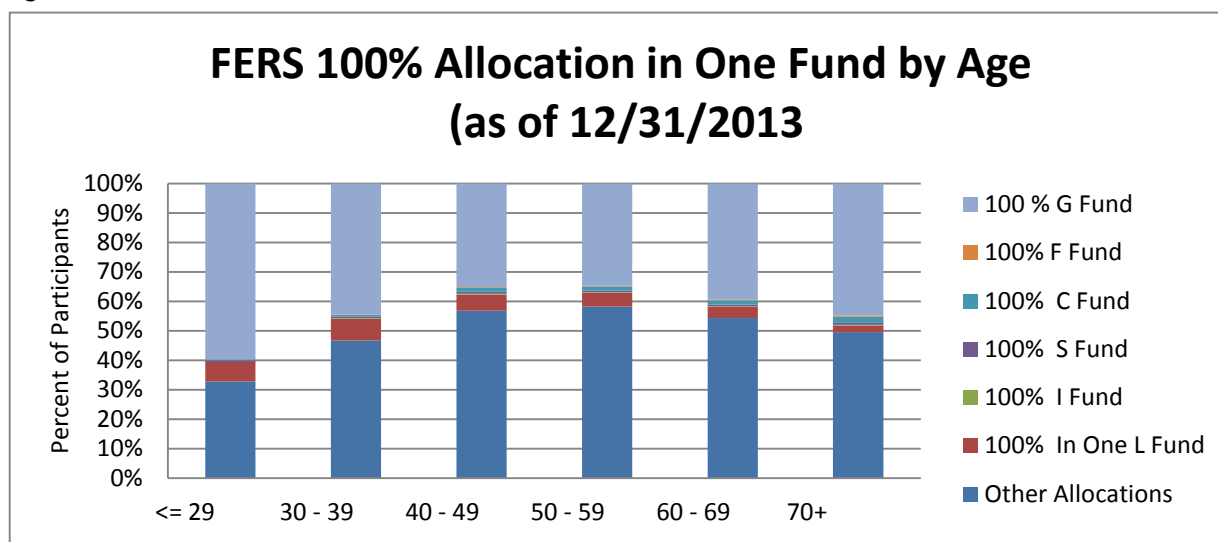
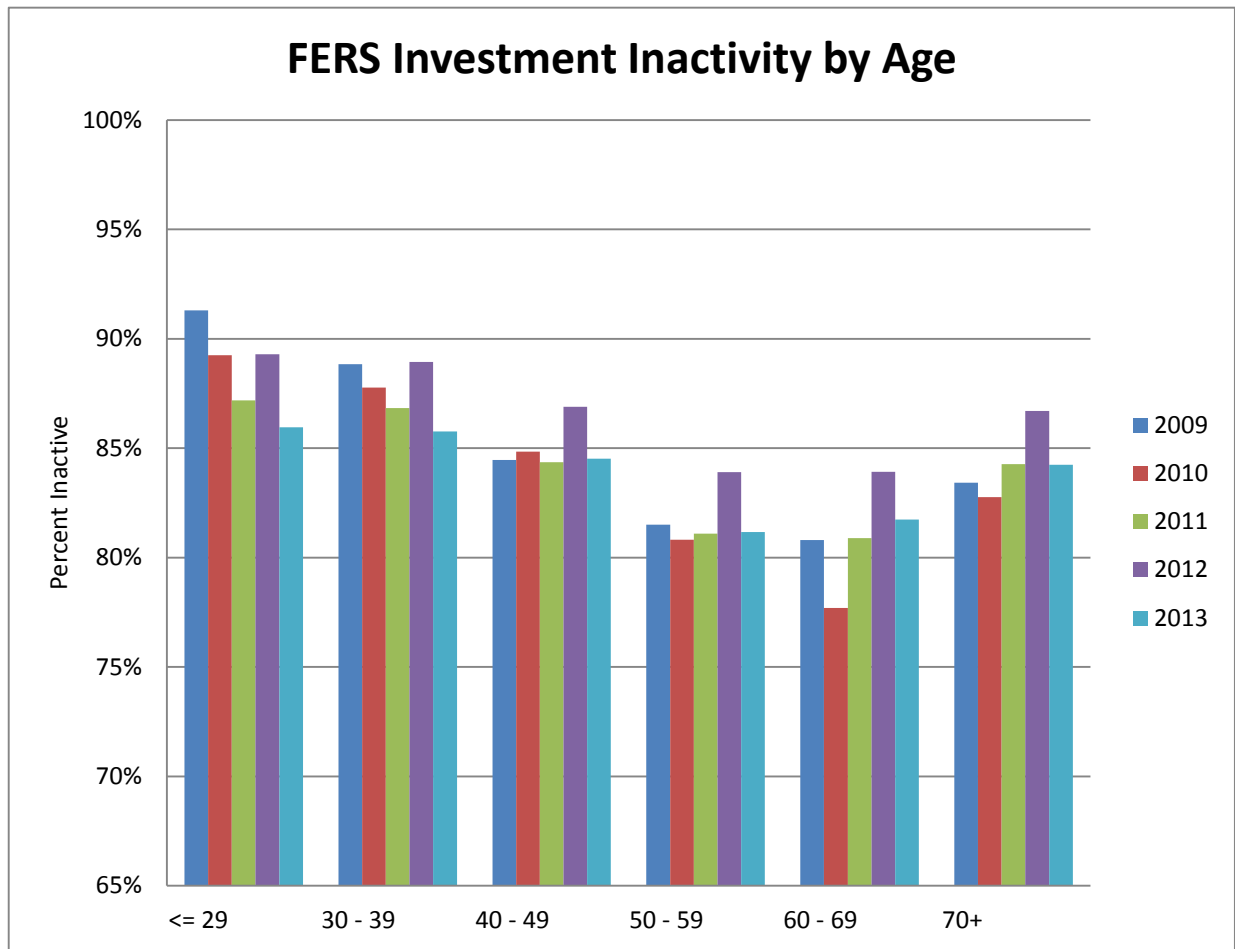


Figure 9 below reports on the percentage of participants who have not engaged in any investment activity, i.e., they did not change how their contributions are invested or make a change to their existing investment allocation in 2013. As illustrated in the chart, the majority of participants do not actively manage their TSP accounts. While the level of inactivity did decline from 2012 to 2013, no age cohort had less than 80% inactive participants. When examining investment inactivity by other demographic filters, only the following cohorts had less than 80% inactive participants: highest paid (75.1%); tenured 21 or more years (76.6%), Asians (78.9%) and bachelor's degree (79.6%).

Figure 9

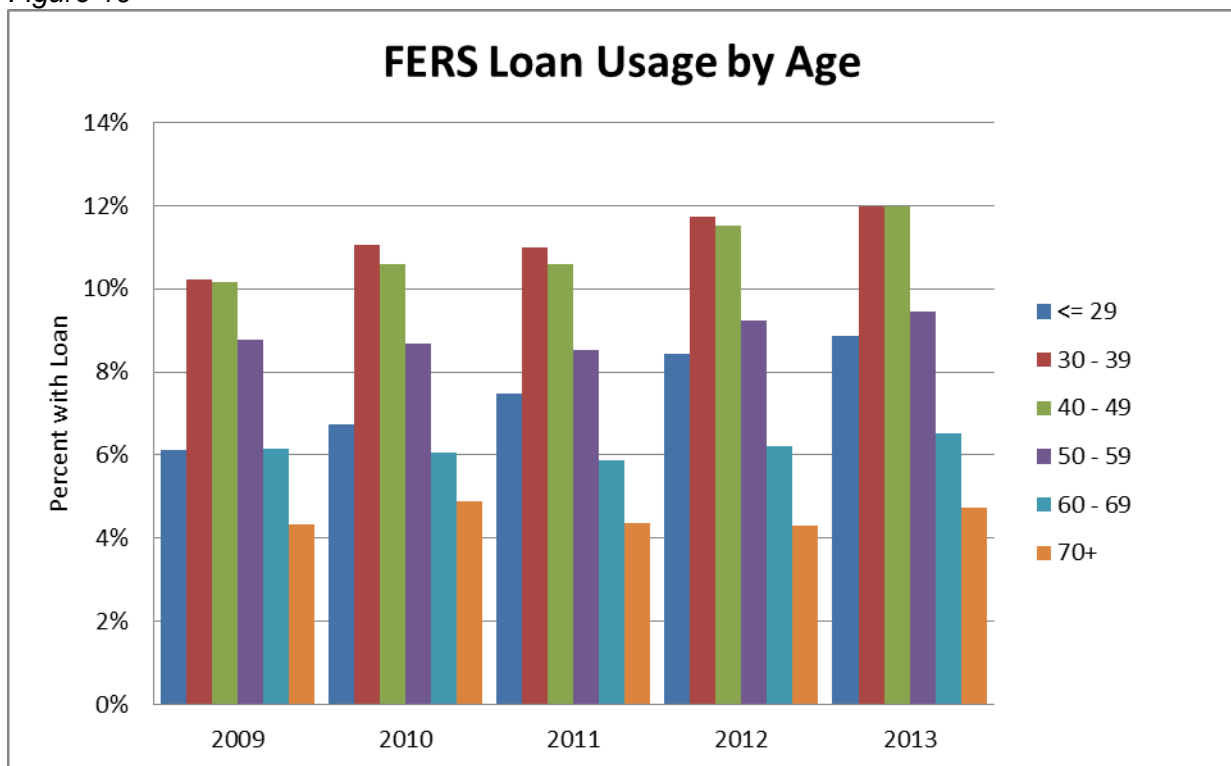


## Loan and Hardship Withdrawal Usage

The TSP allows two types of loans – general purpose and residential. A general purpose loan has a repayment term of 1 to 5 years, while a residential loan has a repayment term of 1 to 15 years. Participants may have only one of each loan type outstanding at the same time. Participants may only borrow their employee contributions and the minimum loan amount is \$1,000.

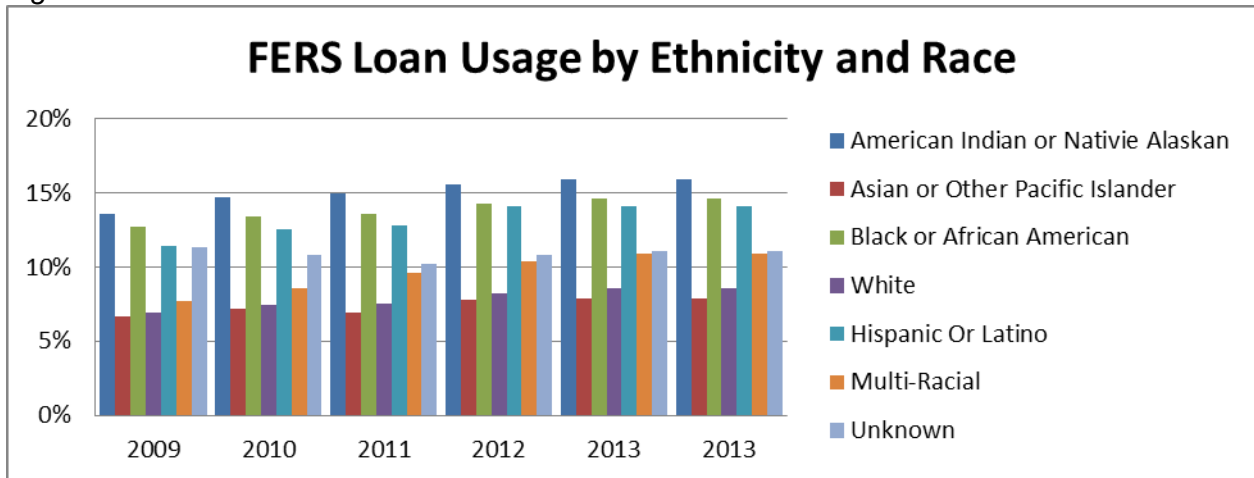
Loan usage has consistently been highest among the 30-39 and 40-49 age cohorts, with approximately 12% of the participants in each cohort receiving a loan in 2013. All age groups experienced an increase in loan usage in 2013. However, the increase was less than one-half of one percent for all age cohorts. See figure 10 for the percent of participants who received a loan issued during each year in the reporting period.

Figure 10



Loan usage is fairly even among all salary quintiles, ranging from approximately 10% to 11% for four out of the five quintiles. The loan usage rate among the highest paid was at 7.8% in 2013. Males and females also had similar rates of loan usage with 10.0% of males and 10.8% of females receiving loans in 2013. However, there is noticeable difference in loan usage among educational and racial/ethnic cohorts. Loan usage drops off with an increased level of education. Only 6.9% of participants with post-bachelor's education received a loan in 2013 as compared to nearly double that amount among those without a high school diploma (13.6%). Figure 11 shows a similar disparity in loan usage among racial and ethnic cohorts with whites and Asians having significantly lower loan usage than other groups.

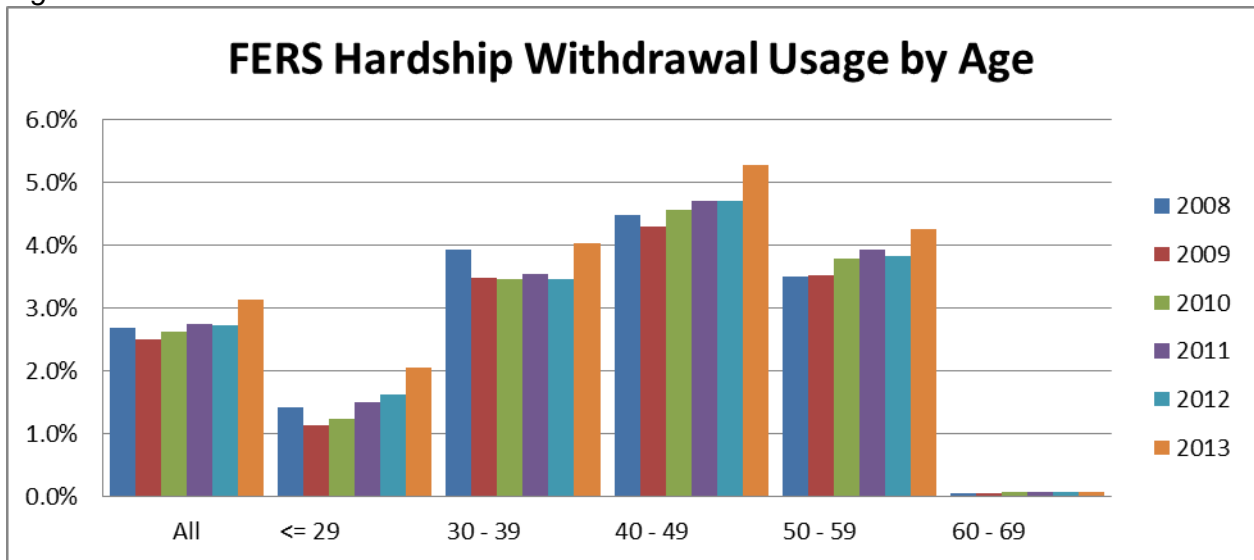
Figure 11



Participants may take a hardship withdrawal if they have a financial need as the result of a recurring negative cash flow, medical expenses, a personal casualty loss, or legal expenses associated with a divorce. Participants may only withdraw their employee contributions, and the minimum withdrawal amount is \$1,000. In addition to a 10% early withdrawal penalty if the participant is younger than 59 ½, employee contributions are suspended for six months after a hardship withdrawal. As a result of the employee contribution suspension, FERS participants do not receive any Agency Matching Contributions during this period.

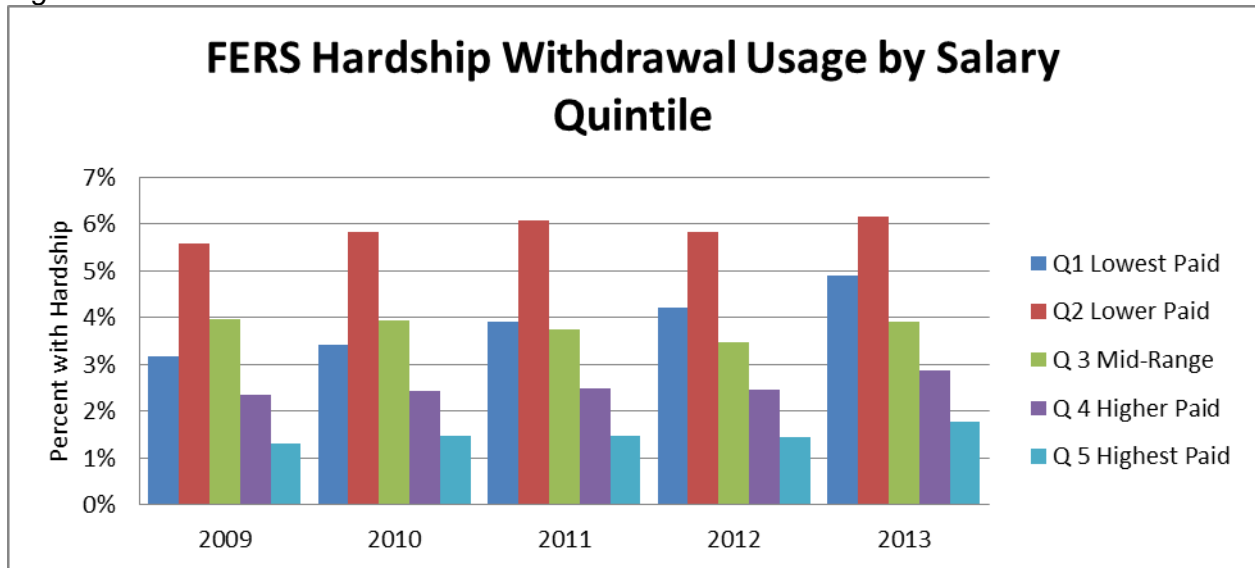
Hardship withdrawal usage is consistently highest among the age 40-49 cohort, with more than 4% of participants in this cohort receiving a hardship withdrawal during the first four years in this reporting period. In 2013, more than 5% of the age 40- 49 cohort received a hardship withdrawal. See figure 12. The three youngest cohorts experienced a slight increase in withdrawal usage in 2013 over the previous year.

Figure 12



There is a stair-step pattern of hardship withdrawal usage among the salary quintiles, with usage generally declining as salary levels increase. See figure 13. However, the first quintile presents an exception to this pattern, as hardship withdrawals were lower than those of the next highest quintile in each of the years examined. It is important to note that hardship withdrawal usage is lower than loan usage among all salary quintiles. Second quintile had the highest usage rate at 6.2%. Among other cohorts, more females (5.0%) than males (3.2%) received hardship withdrawals in 2013, while blacks (8.1%) received more hardship withdrawals than other racial and ethnic cohorts.

Figure 13



## Summary

The analysis reveals an improvement in the FERS participation with a five-year high of 89.6% by the end of 2013. However, the contribution deferral rate dropped to 8.2% - the lowest rate in this reporting period. Automatic enrollment was a contributing factor to both of these observations.

Automatic enrollment helped produce an 18% increase in participation among the shortest-tenured participants. Participants with less than two-years of tenure now participate at a rate of 98.3% - the highest rate of participation among all tenure bands. When examining participation through salary, gender, race/ethnicity, and education filters, virtually every cohort experienced an improved participation rate in 2013.

The analysis also revealed that the vast majority of auto-enrolled participants have “engaged” with 63.2% making deferral changes. Nevertheless, the only participant cohort that was hired entirely after the introduction of automatic enrollment in August 2010 has experienced a dip in deferral rates, down to 3.8% in 2013. This lowest tenured cohort is the only cohort not contributing at a level which results in receiving the full Agency match. While deferral rates continue to aggregate in the 5-6% range, with 30.4% of TSP contributors falling in this range, nearly 75% of FERS participants are estimated to be receiving the full match.

Participants aged 29 and under have a disproportionate percentage (43.6%) of their account balances in the G Fund. However, this group also has the highest utilization of the L Funds (28.7%). We further note that L Fund usage is highest among the 2-5 year tenure cohort (26.4%) and the 6-10 years group (24.9%). The majority of these cohorts were hired after the implementation of the L Funds. Overall, participants are investing in the L Fund in a manner appropriate for their age cohort.

Loan usage rates are evenly distributed among salary quintiles and between males and females. However, noticeable differences were identified among educational and racial/ethnic cohorts. Among age cohorts, the 30-39 and 40-49 age cohorts have the highest loan usage rate at approximately 12% each. The age 40-49 cohort also had the highest hardship withdrawal usage, with more than 4% of participants in this cohort receiving a hardship withdrawal in each year of this reporting period. It was also found that Blacks utilize loans and hardship withdrawals significantly more than white and Asian participants.

## Appendix A

Summary of FERS Demographic Statistics All FERS Fulltime					
	2009	2010	2011	2012	2013
<b>Participant Count</b>	2,030,386	2,115,082	2,155,342	2,136,325	2,157,260
<b>Age</b>					
<=29	2.0%	1.4%	0.9%	0.6%	0.4%
30-39	3.4%	2.8%	2.3%	2.1%	1.9%
40-49	5.2%	4.6%	4.1%	3.8%	3.5%
50-59	3.7%	3.5%	3.5%	3.6%	3.7%
60-69	0.9%	0.9%	1.0%	1.1%	1.1%
70+	0.1%	0.1%	0.1%	0.1%	0.1%
<b>Tenure</b>					
< 2 years	3.5%	2.0%	0.8%	0.1%	0.1%
2-5 years	3.3%	3.2%	3.4%	3.0%	2.2%
6-10 years	2.7%	2.6%	2.4%	2.4%	2.5%
11-20 years	3.3%	3.1%	2.9%	3.1%	3.3%
21+ years	2.3%	2.4%	2.4%	2.6%	2.5%
<b>Gender</b>					
Female	41.9%	41.9%	41.7%	41.7%	41.7%
Male	58.1%	58.1%	58.3%	58.3%	58.3%
<b>Race and Ethnicity</b>					
American Indian or Native Alaskan	1.4%	1.4%	1.4%	1.4%	1.3%
Asian or Other Pacific Islander	4.6%	4.7%	4.8%	4.9%	5.0%
Black or African American	13.6%	13.9%	13.9%	14.0%	14.3%
White	51.5%	52.3%	52.4%	52.4%	52.5%
Hispanic Or Latino	6.3%	6.3%	6.4%	6.5%	6.6%
Multi-Racial	0.5%	0.7%	0.9%	1.0%	1.1%
Unknown	22.1%	20.7%	20.2%	19.8%	19.1%
<b>Education</b>					
Without High School Diploma	0.5%	0.4%	0.4%	0.4%	0.4%
High School Diploma	21.3%	21.5%	21.4%	20.8%	20.6%
Some College or Training	19.2%	19.2%	19.1%	19.1%	19.0%
Bachelor's Degree	20.1%	20.9%	21.2%	21.4%	21.7%
Post-Bachelor's Education/Degree	16.0%	17.2%	17.8%	18.4%	19.2%
Unknown	22.8%	20.7%	20.1%	19.8%	19.1%
<b>Average Age</b>	49.6	48.6	47.9	47.4	46.7
<b>Average Tenure</b>	12.0	12.1	11.9	12.4	12.7
<b>Average Salary</b>	\$67,645	\$70,065	\$71,425	\$72,472	\$73,892
<b>Average TSP Balance</b>	\$68,435	\$77,617	\$81,924	\$93,445	\$109,631

## Appendix B

Summary of FERS Demographic Statistics FERS Fulltime Contributing					
	2009	2010	2011	2012	2013
<b>Participant Count</b>	1,830,700	1,946,863	2,003,804	2,001,235	2,026,044
<b>Age</b>					
<=29	8%	9%	8%	8%	7%
30-39	20%	20%	20%	20%	21%
40-49	34%	32%	31%	30%	29%
50-59	29%	30%	31%	32%	33%
60-69	8%	9%	9%	10%	10%
70+	0%	0%	1%	1%	1%
<b>Tenure</b>					
< 2 years	10%	11%	12%	9%	9%
2-5 years	18%	19%	21%	22%	21%
6-10 years	20%	20%	20%	20%	20%
11-20 years	29%	26%	25%	25%	26%
21+ years	23%	24%	23%	24%	23%
<b>Gender</b>					
Female	42.89%	42.90%	42.54%	42.56%	42.60%
Male	57.11%	57.10%	57.46%	57.43%	57.39%
<b>Race and Ethnicity</b>					
American Indian or Native Alaskan	1%	1%	1%	1%	1%
Asian or Other Pacific Islander	5%	5%	5%	5%	5%
Black or African American	12%	12%	13%	13%	13%
White	52%	53%	54%	54%	54%
Hispanic Or Latino	6%	6%	6%	6%	7%
Multi-Racial	0%	1%	1%	1%	1%
Unknown	23%	21%	20%	19%	18%
<b>Education</b>					
Without High School Diploma	0%	0%	0%	0%	0%
High School Diploma	20%	20%	20%	20%	20%
Some College or Training	18%	18%	19%	19%	19%
Bachelor's Degree	21%	22%	22%	22%	23%
Post-Bachelor's Education/Degree	17%	18%	19%	20%	21%
Unknown	24%	21%	20%	19%	18%
<b>Average Age</b>	49.6	48.7	47.9	47.4	46.6
<b>Average Tenure</b>	12.3	12.1	11.8	12.2	12.4
<b>Average Salary</b>	\$69,986	\$72,107	\$73,143	\$74,055	\$75,374
<b>Average TSP Balance</b>	\$79,653	\$88,299	\$91,012	\$102,937	\$120,163



## Appendix C

Summary of FERS Demographic Statistics FERS Fulltime Non-contributing					
	2009	2010	2011	2012	2013
<b>Participant Count</b>	354,728	323,529	279,948	259,894	249,699
<b>Age</b>					
<=29	14.6%	12.1%	8.1%	5.8%	4.5%
30-39	22.4%	21.6%	20.0%	18.7%	18.3%
40-49	32.7%	33.0%	33.9%	33.3%	32.2%
50-59	23.5%	25.5%	29.0%	31.8%	33.6%
60-69	6.3%	7.2%	8.3%	9.6%	10.5%
70+	0.5%	0.6%	0.7%	0.8%	0.9%
<b>Tenure</b>					
< 2 years	25.2%	16.6%	6.9%	1.4%	1.4%
2-5 years	23.6%	26.8%	30.4%	28.1%	21.9%
6-10 years	17.5%	18.9%	19.9%	22.1%	24.2%
11-20 years	20.3%	21.8%	23.9%	26.8%	30.2%
21+ years	13.3%	15.9%	19.0%	21.6%	22.3%
<b>Gender</b>					
Female	44.5%	44.3%	43.3%	43.4%	43.6%
Male	55.5%	55.7%	56.7%	56.6%	56.4%
<b>Race and Ethnicity</b>					
American Indian or Native Alaskan	2.2%	2.0%	2.0%	2.0%	2.0%
Asian or Other Pacific Islander	3.1%	2.9%	2.7%	2.5%	2.5%
Black or African American	20.5%	20.7%	20.7%	21.3%	21.9%
White	44.1%	42.9%	40.3%	38.6%	38.4%
Hispanic Or Latino	6.8%	6.9%	6.6%	6.5%	6.8%
Multi-Racial	0.8%	0.9%	0.9%	0.9%	1.0%
Unknown	22.5%	23.6%	26.8%	28.3%	27.4%
<b>Education</b>					
Without High School Diploma	0.9%	0.8%	0.8%	0.8%	0.8%
High School Diploma	31.4%	32.1%	30.5%	29.2%	29.8%
Some College or Training	22.1%	22.1%	21.6%	21.5%	21.6%
Bachelor's Degree	12.2%	12.4%	12.0%	11.8%	12.0%
Post-Bachelor's Education/Degree	8.9%	8.8%	8.4%	8.3%	8.3%
Unknown	24.5%	23.8%	26.8%	28.3%	27.4%
<b>Average Age</b>	47.5	47.4	47.8	47.9	47.5
<b>Average Tenure</b>	8.5	9.6	10.8	12.2	13.0
<b>Average Salary</b>	\$53,996	\$56,461	\$59,248	\$60,574	\$61,394
<b>Average TSP Balance</b>	\$10,538	\$13,333	\$16,877	\$20,355	\$24,182

## Appendix D

### FERS Salary Quintiles

Year	Count Salary	Number of Participants	Quintile 1 Lowest Paid		Quintile 2 Lower Paid		Quintile 3 Mid-Range		Quintile 4 Higher Paid		Quintile 5 Highest Paid	
			Bottom	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom	Top
<b>2013</b>	Count	2,150,861	1	430,172	430,173	860,344	860,345	1,290,516	1,290,517	1,720,688	1,720,689	2,150,560
	Salary		\$10,000	\$50,611	\$50,611	\$57,219	\$57,219	\$73,420	\$73,420	\$97,701	\$97,701	\$230,700
<b>2012</b>	Count	2,130,944	1	426,189	426,190	852,378	852,378	1,278,567	1,278,568	1,704,756	1,704,757	2,130,944
	Salary		\$10,000	\$48,775	\$49,775	\$56,508	\$56,508	\$71,201	\$71,201	\$95,459	\$95,459	\$230,700
<b>2011</b>	Count	2,150,461	1	430,093	430,094	860,185	860,186	1,290,277	1,290,278	1,720,369	1,720,370	2,150,461
	Salary		\$10,000	\$49,075	\$49,075	\$56,508	\$56,508	\$70,062	\$70,062	\$94,551	\$94,551	\$230,700
<b>2010</b>	Count	2,110,401	1	422,081	422,082	844,161	844,162	1,266,241	1,266,242	1,688,321	1,688,322	2,110,400
	Salary		\$10,000	\$47,900	\$47,900	\$55,530	\$55,530	\$67,762	\$67,762	\$92,431	\$92,431	\$230,700
<b>2009</b>	Count	2,026,503	1	405,301	405,302	810,602	810,603	1,215,903	1,215,904	1,621,203	1,621,204	2,026,503
	Salary		\$10,000	\$46,625	\$46,625	\$54,122	\$54,122	\$63,930	\$63,930	\$88,699	\$88,699	\$227,300