



Thrift Savings Plan

Analysis of Participant Behavior and Demographics for 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 analyses of data conducted in previous years.

As with the 2012 report, the 2013 analysis focuses 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 in 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 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 its 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 full-time 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

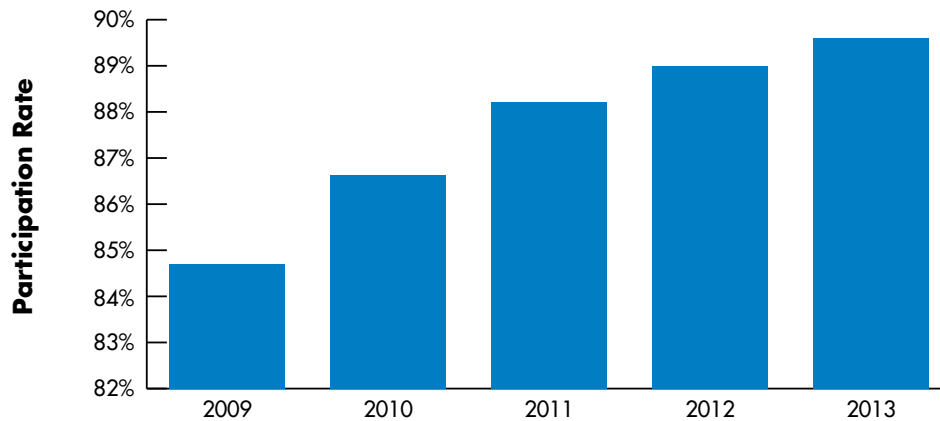
The following sections of this report examine the behaviors of FERS participants across a five-year timeframe ending December 31, 2013 and through the lens of six demographic filters: age, tenure, salary, gender, race and ethnicity, and education. The exhibits and narratives display the relationships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

FERS Participation Rates



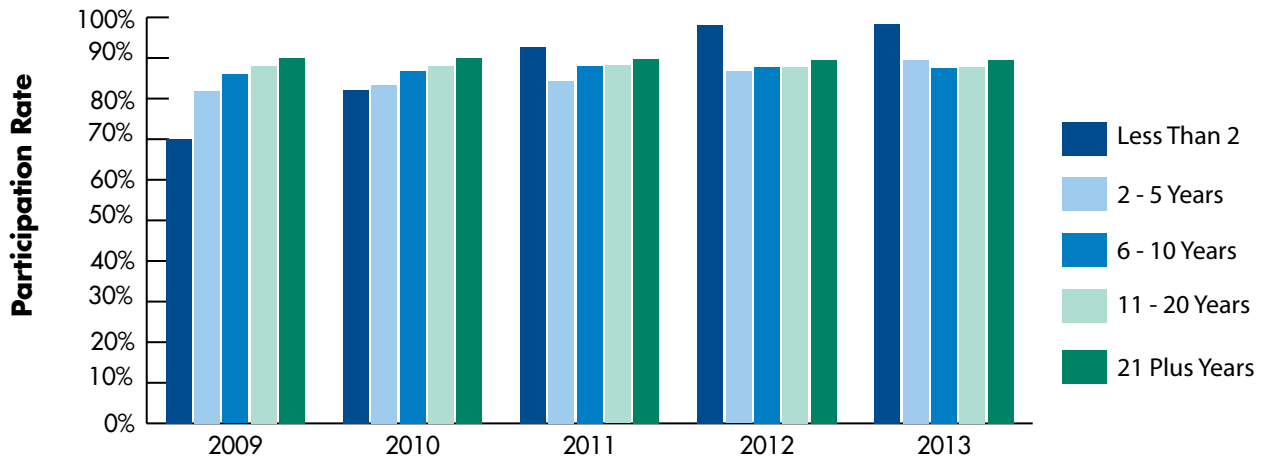
The economic rebound and automatic enrollment contributed significantly to the improvement in participation rates in 2010—the same year that automatic enrollment was instituted—with an almost 2% gain. Gains in participation of nearly 1% followed in 2011 and 2012, with a slightly lower increase in 2013. 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 years of employment or less, 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 (70.0%) in 2009 while the longest-tenured participated at a rate of 90.0%. By 2013, those with fewer 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.

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

Figure 2

FERS Participation Rates By Tenure



Automatic enrollment seems to have had varying effects on other demographic cohorts. In 2009, the participation rate for the under-29 cohort was the lowest among all age cohorts at 78%, while the 60-69 cohort had the highest participation at 88.4%. By 2013, the youngest cohort had surpassed all other 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%. Among race and ethnicity cohorts, blacks and multiracial participants showed the greatest increase in participation. Despite their increased participation, blacks still rank lowest among racial/ethnic groups, well below the group with the highest rate (Asians, 95%). 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 on page 5.

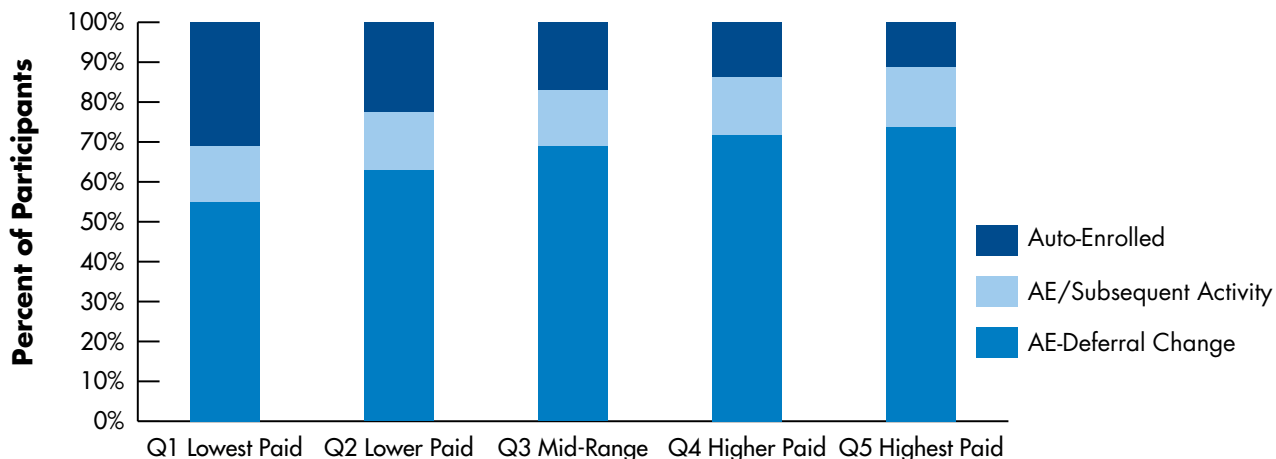
Table 1

Annual FERS Participation Rates by Demographic Cohorts

	2009	2010	2011	2012	2013
Age					
< = 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%
Tenure					
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%
Salary Quintile					
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%
Gender					
Female	84.7%	86.6%	88.0%	88.6%	89.1%
Male	85.0%	86.7%	88.2%	88.9%	89.3%
Race and Ethnicity					
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%
Education					
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 /Degree	91.5%	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 making interfund transfers or other transactions. 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 FERS Automatic Enrollment Status by Salary Quintile (as of 12/31/2013)



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 FERS Deferral Rates

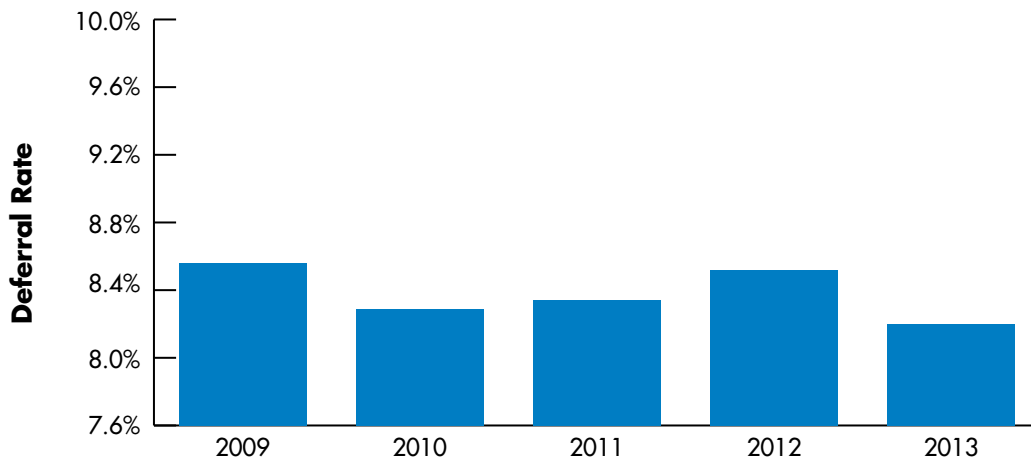
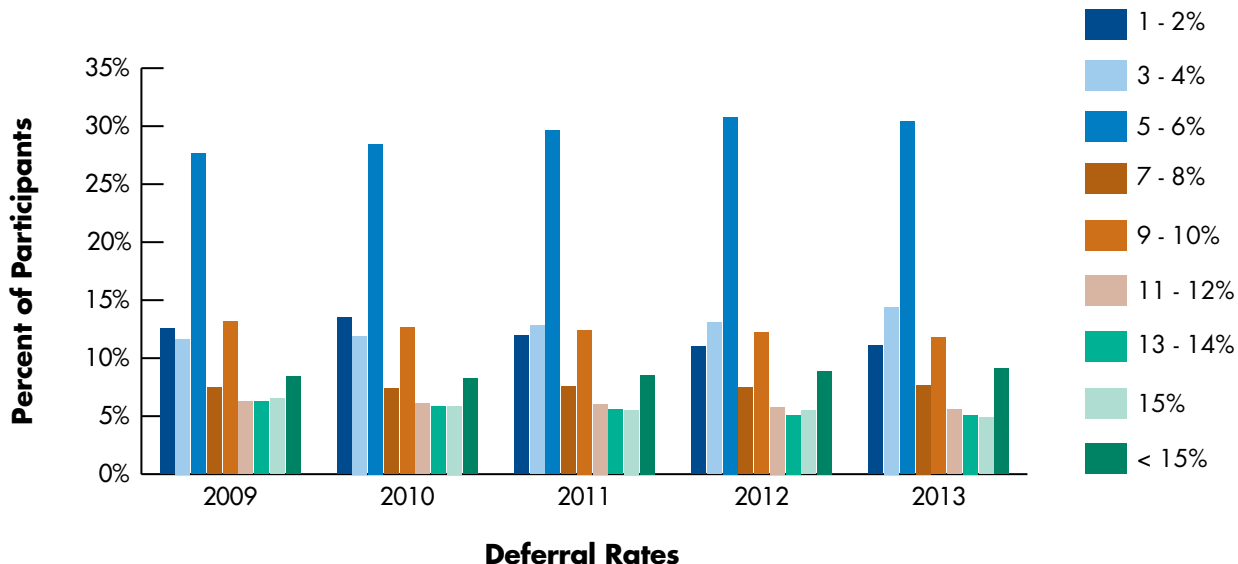


Figure 5 illustrates the power of plan design on participant behavior. FERS participants receive dollar-for-dollar matching contributions on the first 3% of pay and 50 cents on the dollar on the next 2%. The full match is achieved with a 5% contribution. Consequently, deferral rates aggregate in the 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

Distribution of FERS Deferral Rates



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 lag behind Asians at 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
Age					
< = 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%
Tenure					
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%
Salary Quintile					
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%
Gender					
Female	7.6%	7.4%	7.4%	7.5%	7.4%
Male	8.3%	8.0%	8.1%	8.1%	8.0%
Race and Ethnicity					
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%
Education					
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 /Degree	9.1%	8.7%	8.8%	8.9%	8.8%

Investment Allocation and Inactivity

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.) As with the traditional TSP, Roth deferral rates are highest among older participants, as well as the most-tenured and highest-paid.

2013 FERS Deferral Rates

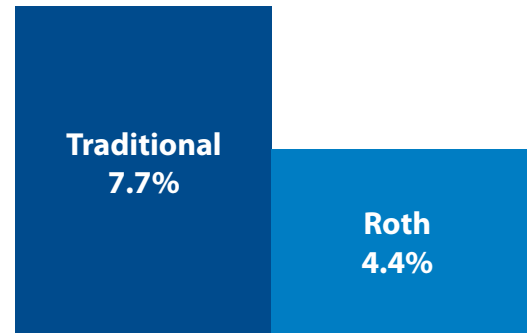


Table 3

FERS Traditional and Roth Deferral Rates by Demographic Cohorts

	Traditional	Roth
Age		
< = 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%
Tenure		
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%
Salary Quintile		
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%

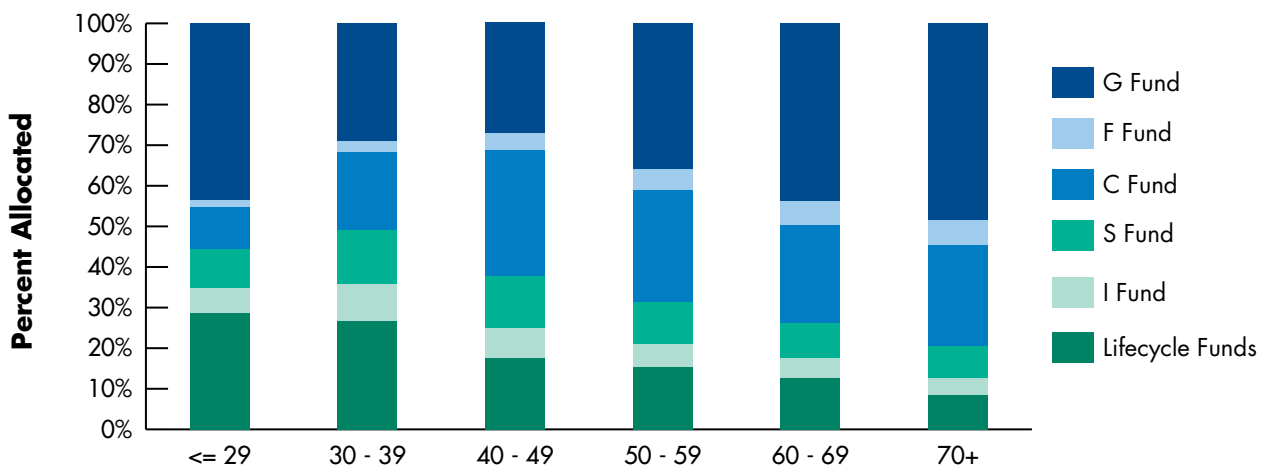
Investment Allocation and Inactivity

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%** their assets invested in the G Fund.*

Figure 6

FERS Investment Allocation By Age (as of 12/31/2013)



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. 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 allocated 43.3% to the G Fund, well above the allocation levels of Asians at 32% and whites at 30%. See Table 4.

The two youngest age cohorts had the highest level of usage of the Lifecycle (L) funds, 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. Use 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.

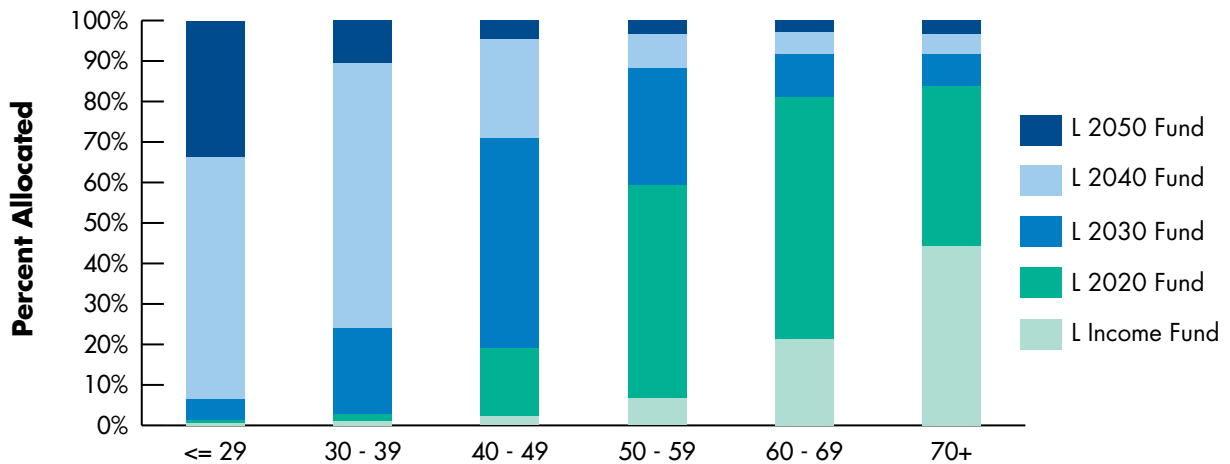
Table 4

Annual Investment Allocations by Demographic Cohorts

	G Fund	F Fund	C Fund	S Fund	I Fund	L Funds
Age						
< = 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%
Tenure						
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%
Salary Quintile						
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%
Gender						
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%
Race and Ethnicity						
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%
Education						
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 /Degree	27.6%	5.4%	29.3%	11.6%	6/8%	19.4%

Of the participants using the L Funds, the allocation is largely as we would hope. Those in the age 29 and under cohort were appropriately taking advantage of the L 2040 and L 2050 Funds. Participants who would likely retire between 2025 and 2035 (the 40-49 age group) were in L 2030 and L 2040 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 FERS Lifecycle Investment Allocation By Age (as of 12/31/2013)



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 percentage 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-29 cohort is invested solely in the G Fund. See Figure 8.

Figure 8 FERS 100% Allocation in One Fund by Age (as of 12/31/2013)

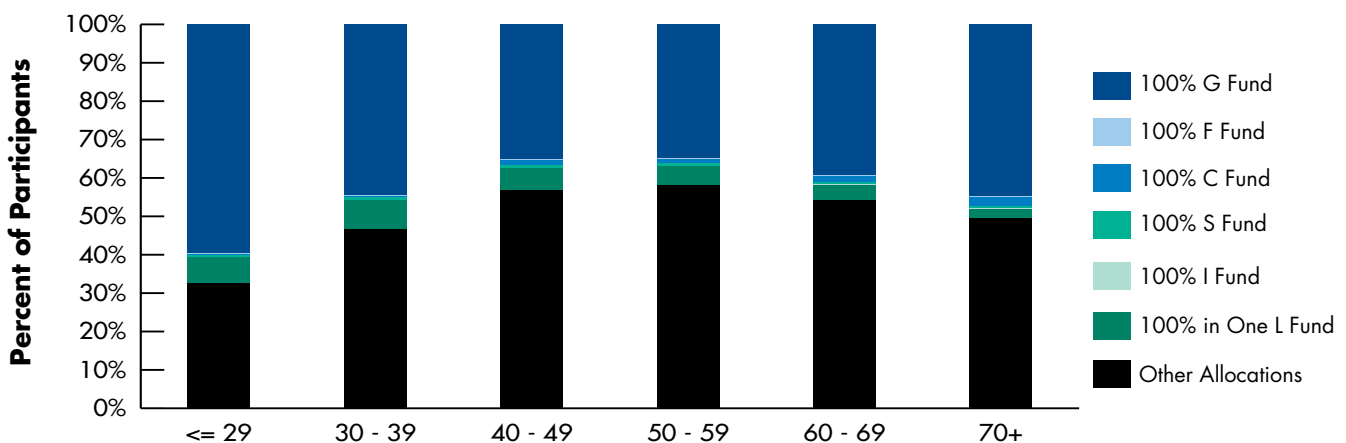
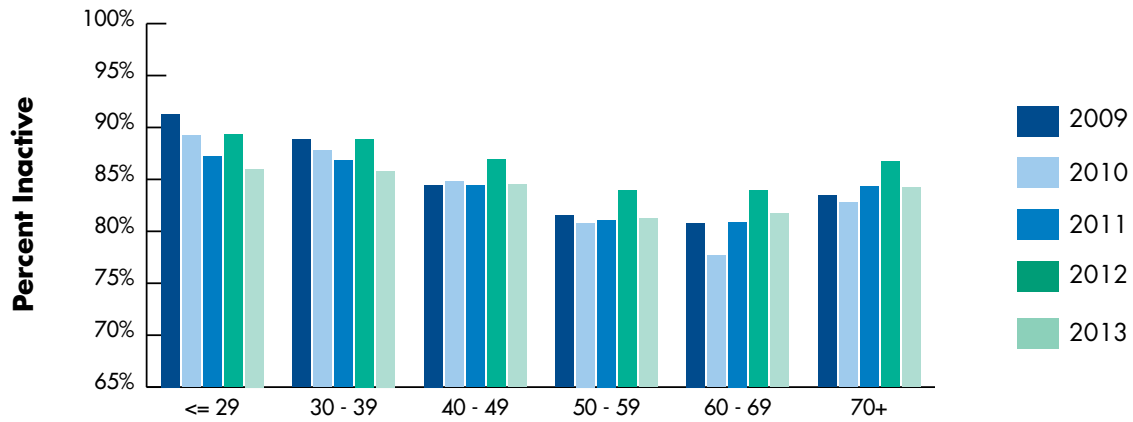


Figure 9 below reports on the percentage of participants who have not engaged in any investment activity, i.e., they did not change how their contributions are invested or make a change to their existing investment allocation in 2013. As illustrated in the chart, the majority of participants do not actively manage their TSP accounts. While the level of inactivity did decline from 2012 to 2013, no age cohort had less than 80% inactive participants. Among all demographic cohorts, only the following 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

FERS Investment Inactivity by Age

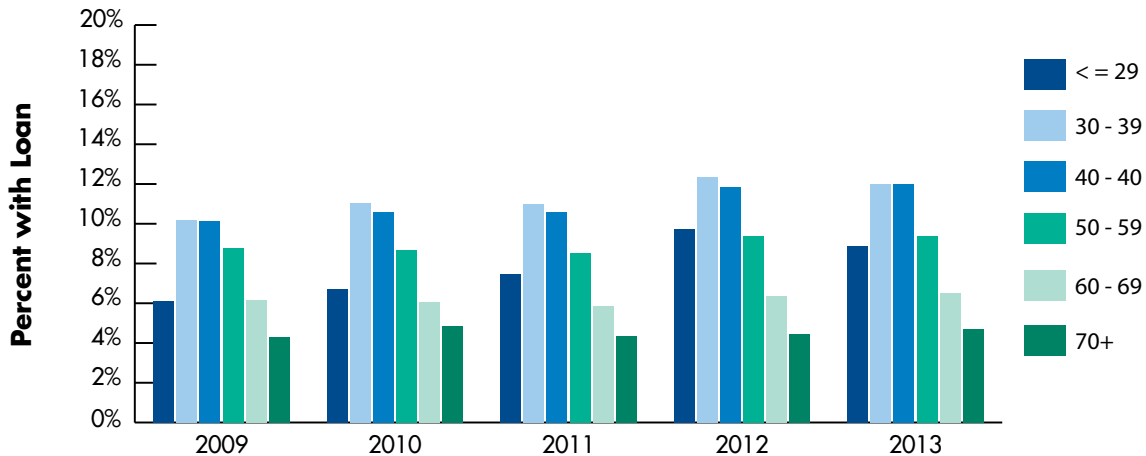


Loan and Hardship Withdrawal Usage

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.

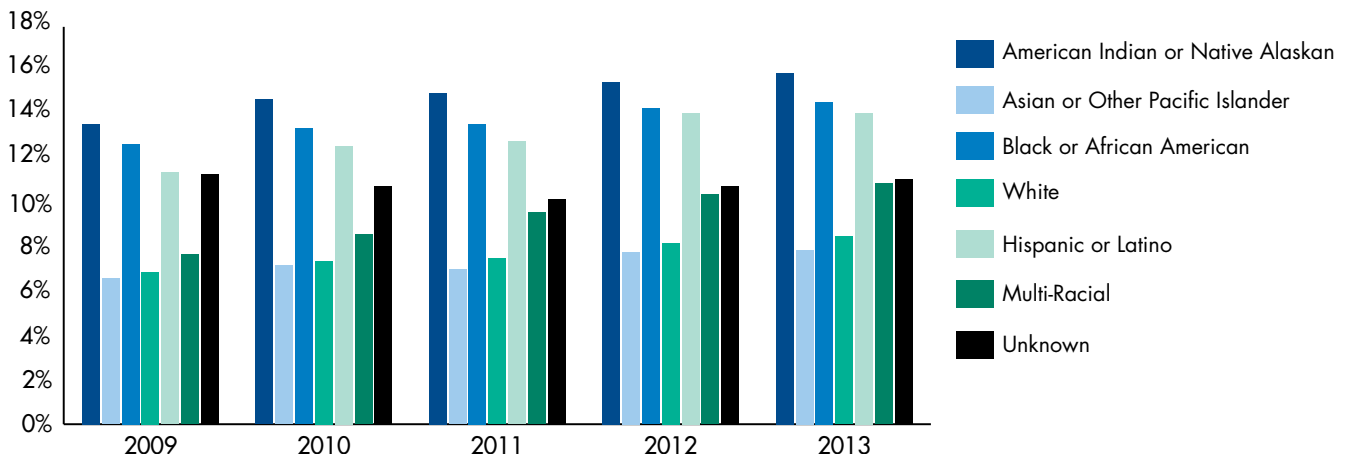
Loan usage has consistently been highest among the 30-39 and 40-49 age cohorts, with approximately 12% of the participants in each cohort receiving a loan in 2013. All age groups experienced an increase in loan usage in 2013. However, the increase was less than one-half of one percent for all age cohorts.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

Figure 10 FERS Loan Usage Age



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.

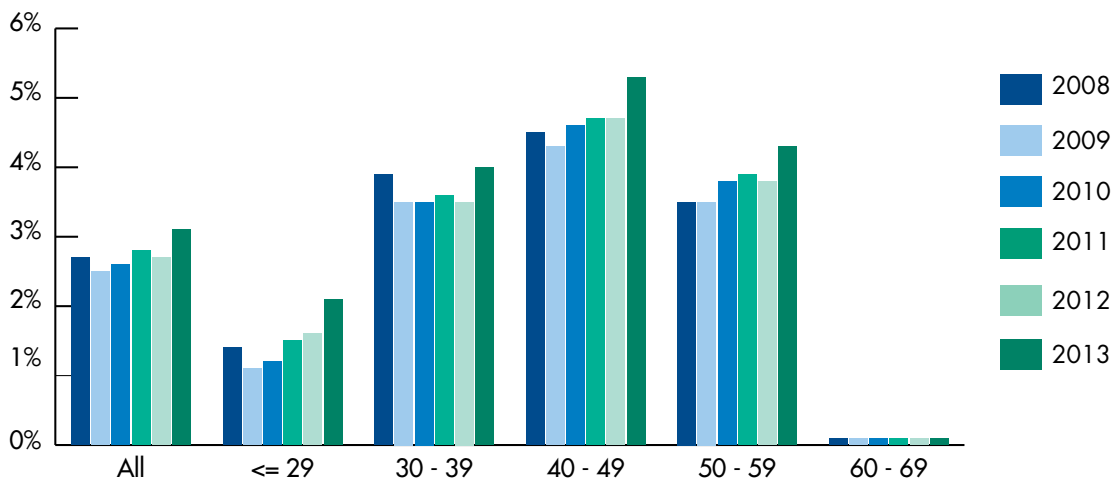
Figure 11 FERS Loan Usage by Ethnicity and Race



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 59½, 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, as well as the 50-59 cohort, experienced a slight increase in withdrawal usage in 2013 over the previous year.

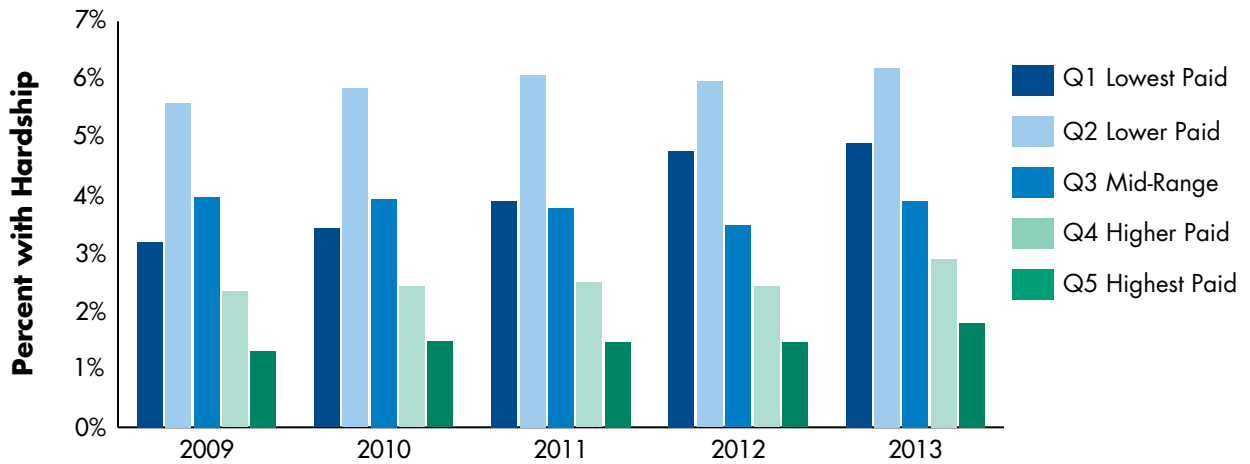
Figure 12 FERS Hardship Withdrawal Usage by Age



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. The 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

FERS Hardship Withdrawal Usage by Salary Quintile



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 contributed to both changes.

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. In 2013, participation rates increased in virtually every cohort of salary, gender, race/ethnicity, and education.

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. Deferral rates continue to aggregate in the 5-6% range, with 30.4% of TSP contributors falling in this range, and 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-year group (24.9%). The majority of these cohorts were hired after the implementation of the L Funds. Overall, participants are investing in the L Funds 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 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 use loans and hardship withdrawals significantly more than white and Asian participants.

Appendix A

Summary of FERS Demographic Statistics All FERS Full-time

	2009	2010	2011	2012	2013
Participant Count	2,030,386	2,115,082	2,155,342	2,136,325	2,157,260
Age					
< = 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%
Tenure					
Less than 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%
Gender					
Female	41.9%	41.9%	41.7%	41.7%	41.7%
Male	58.1%	58.1%	58.3%	58.3%	58.3%
Race and Ethnicity					
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%	20.7%	19.8%	19.1%
Education					
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/Degree	16.0%	17.2%	17.8%	18.4%	19.2%
Unknown	22.8%	20.7%	20.1%	19.8%	19.1%
Average Age	49.6	48.6	47.9	47.4	46.7
Average Tenure	12.0	12.1	11.9	12.4	12.7
Average Salary	\$67,645	\$70,065	\$71,425	\$72,472	\$73,892
Average TSP Balance	\$68,435	\$77,617	\$81,924	\$93,445	\$109,631

Appendix B

Summary of FERS Demographic Statistics FERS Full-time Contributing

	2009	2010	2011	2012	2013
Participant Count	1,830,700	1,946,863	2,003,804	2,001,235	2,026,044
Age					
< = 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%
Tenure					
Less than 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%
Gender					
Female	42.89%	42.90%	42.54%	42.56%	42.60%
Male	57.11%	57.10%	57.46%	57.43%	57.39%
Race and Ethnicity					
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%
Education					
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/Degree	17%	18%	19%	20%	21%
Unknown	24%	21%	20%	19%	18%
Average Age	49.6	48.7	47.9	47.4	46.6
Average Tenure	12.3	12.1	11.8	12.2	12.4
Average Salary	\$69,986	\$72,107	\$73,143	\$74,055	\$75,374
Average TSP Balance	\$79,653	\$88,299	\$91,012	\$102,937	\$120,163

Appendix C

Summary of FERS Demographic Statistics FERS Full-time Non-Contributing

	2009	2010	2011	2012	2013
Participant Count	354,728	323,529	279,948	259,894	249,699
Age					
< = 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%
Tenure					
Less than 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%
Gender					
Female	44.5%	44.3%	43.3%	43.4%	43.6%
Male	55.5%	55.7%	56.7%	56.6%	56.4%
Race and Ethnicity					
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%
Education					
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/Degree	8.9%	8.8%	8.4%	8.3%	8.3%
Unknown	24.5%	23.8%	26.8%	28.3%	27.4%
Average Age	47.5	47.4	47.8	47.9	47.5
Average Tenure	8.5	9.6	10.8	12.2	13.0
Average Salary	\$53,996	\$56,461	\$59,248	\$60,574	\$61,394
Average TSP Balance	\$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
2013	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
2012	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
2011	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
2010	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
2009	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