Thrift Savings Plan

Participant Behavior and Demographics (FERS)

Analysis of 2016 – 2020

Introduction

This analysis of Thrift Savings Plan (TSP) participant demographics prepared by the Federal Retirement Thrift Investment Board is based on participant data. The analysis of calendar year 2020 data is similar to analysis of data conducted in the previous year.

As with the 2019 report, the 2020 review will focus solely on participants in FERS, the Federal Employee Retirement System. Information from this analysis provides insight on demographics, investment behaviors, and how plan design changes may have influenced participation and contribution behaviors. Finally, this analysis helps us identify trends with 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 ten Lifecycle Funds (*L Funds*); TSP added six additional funds on July 1, 2020 and retired the L 2020 Fund. The L Funds are custom target-date funds, provided in five-year intervals, 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: in January 2018, the Blended Retirement System (BRS) was implemented; on October 1, 2020, TSP raised the default deferral rate to 5% from 3%; and the Additional Withdrawals Project (AWP) launched September 15, 2019 providing increased withdrawal flexibilities and removed the 6-month hardship contribution suspension. Note: Discussion of BRS is out of scope for this report.

Data Collection and Methodology

This report is based on data extracted from the TSP recordkeeping system for all TSP participants identified as active civilian Federal employees covered by the FERS retirement system.

In the same manner as the 2019 report, agency 1% automatic contributions were used to estimate salary. This value is then used to calculate salary quintiles and the average deferral rate. This method excludes overtime and performance awards, so does not represent the total employee compensation. However, matching percentages are based solely on basic salary including locality pay. The effect is that the average deferral rate (calculated using a smaller denominator) will be higher using this methodology and will largely match the participant's elected deferral rate percentage. This effect is expected to be roughly equivalent across salary ranges, so the use of salary quintiles will mitigate the impact.

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.

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

> The calculation of salary based on automatic 1% contributions may modestly distort the findings compared to reports prior to 2016 when OPM data was last available, showing a higher rate but one more representative of the participant's actual deferral choice.
>
> The inclusion of TSP accounts for employees of the Legislative and Judicial branches may modestly alter the findings when compared to reports prior to 2016.
>
> The TSP recordkeeping system does not have information on a participant's work schedule. However, the inclusion of TSP accounts for part-time and intermittent workers is likely to have a more meaningful impact on the findings compares to reports prior to 2016. Since this group is likely to participate and contribute at lower rates than full-time employees, this inclusion will also likely result in a negative bias compared to analysis of only full-time employees, particularly in the lowest salary quintile.
>
> Employees' actual deferral rate elections are not included in the TSP databases. Therefore, an approximation of annualized deferral rate is calculated by comparing the actual total employee contributions to the estimated annual salary rate for each calendar year.

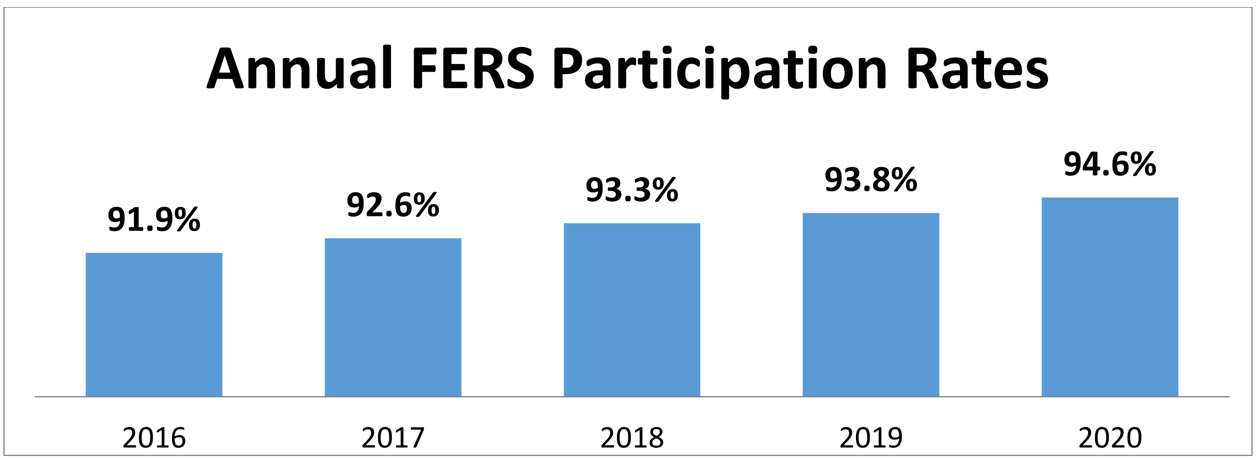
Analysis

The following sections of this report examine the behaviors of FERS participants across a five-year timeframe ending December 31, 2020 and through the lens of two demographic filters – age and salary. The analysis focuses on the relationships between these demographic factors and participant behaviors associated with participation and automatic enrollment, deferral rates, investment allocation, and loan and hardship withdrawal usage.

Plan Participation

The FERS participation rate continues to increase, reaching a new high of 94.6% at the end of 2020, a 0.8 percentage point increase over 2019 participation levels. This is partly due to the removal of the 6-month hardship contribution suspension on September 15, 2019. Figure 1 illustrates the steady improvement in the participation rate over the last 5 years continuing the trend since the implementation of automatic enrollment for new hires in 2010. Automatic enrollment allows new employees to automatically have 5%[1] of their salary deferred into the TSP and receive full agency matching unless the employee makes an active election to reduce their participation or chose not to participate in the Plan.

Figure 1



Automatic enrollment has also led to similar improvements in the participation of the youngest and lowest-paid. In contrast to the trend prior to auto-enrollment, the younger the participant, the more likely they are to participate. As these participants are also the most likely to have been hired after the introduction of automatic enrollment in 2010, there is a clear linkage between the trend in these rates and automatic enrollment. Additionally, with auto-enrollment capturing new workers regardless of salary, the gap in participation rates between the highest paid and lowest paid continued to shrink, from a 7.5 percentage point difference in 2016 versus 3.6 percentage points in 2020. See Table 1 below:

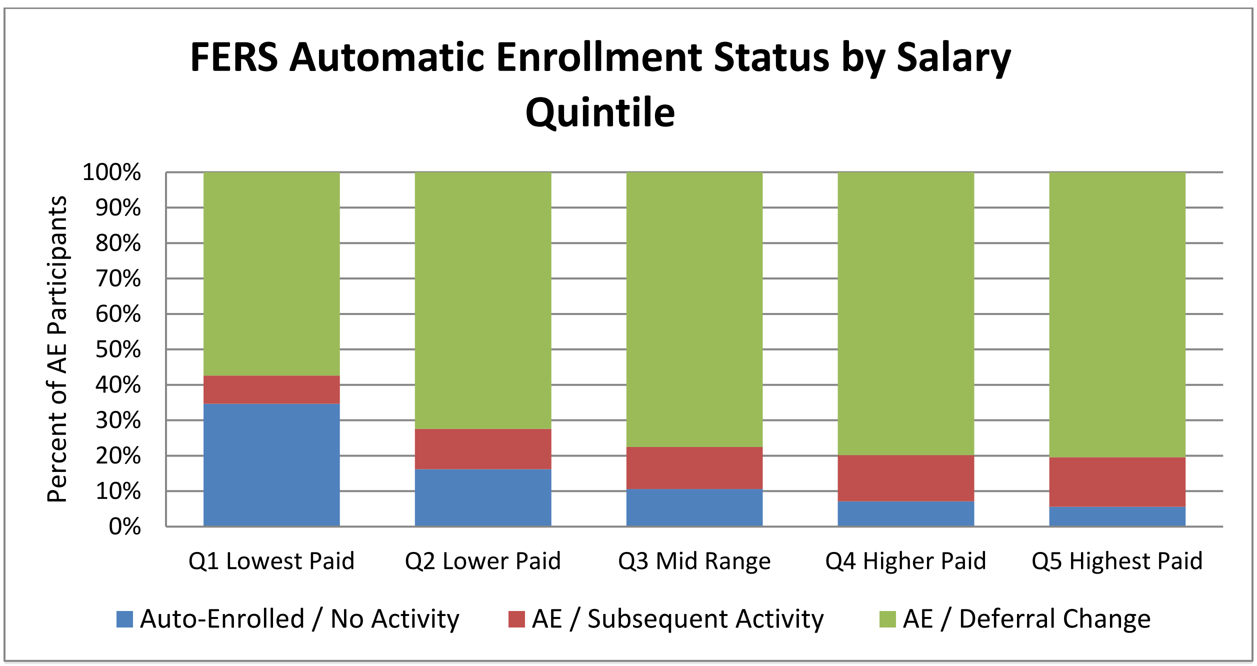
[1] Default deferral rate for automatically enrolled participants increased from 3% to 5% on October 1, 2020.

Table 1

Annual FERS Participation Rates by Demographic Cohorts					
	2016	**2017**	**2018**	**2019**	**2020**
Age					
<= 29	96.8%	96.5%	97.1%	97.0%	97.3%
30 – 39	94.2%	94.6%	95.3%	95.7%	96.2%
40 – 49	91.3%	92.1%	92.9%	93.6%	94.6%
50 – 59	90.8%	91.5%	92.2%	92.7%	93.5%
60 – 69	90.2%	90.8%	91.4%	91.9%	92.6%
70+	86.9%	87.7%	87.6%	88.2%	88.6%
Salary Quintile					
Q1 Lowest Paid	89.1%	91.5%	92.5%	92.9%	93.8%
Q2 Lower Paid	87.7%	89.1%	90.1%	91.1%	92.2%
Q3 Mid-Range	90.2%	90.8%	91.3%	91.7%	92.9%
Q4 Higher Paid	94.4%	94.7%	94.9%	95.2%	95.7%
Q5 Highest Paid	96.6%	96.7%	96.9%	97.0%	97.4%

Auto-enrollment has resulted in continued increase in participation rates since implementation in 2010, with approximately 1.7% of auto-enrolled (AE) participants opting out of making contributions. In addition, auto-enrolled participants have demonstrated a relatively high degree of engagement with the TSP as 81% have actively made deferral changes, interfund transfers or other transactions since entering the Plan. However, as shown in figure 2, the portion of those who have made no change since being auto-enrolled decreased as salary increased from 35% in the lowest quintile to 6% in the highest quintile of salary.

Figure 2



Deferral Rates

The FERS deferral rate (includes employee Roth, traditional and catch-up contributions) has previously leveled around 7.9%; however, it has jumped to 8.1% in 2020 as shown in figure 3. The FERS deferral rate exceeds the 7.1% average deferral rate (ADP) of other defined contribution plans according to Deloitte[2] and the 7.0% ADP for automatic plans according to Vanguard[3]. However, it is still significantly lower than the 9.5% FERS deferral rates of the mid-2000s. This drop is a side effect of automatic enrollment. While increasing the participation rate by including many new participants who would not otherwise have been participating, many of these auto-enrolled participants have continued to contribute at the 3% or 5% default level[4]. The increase in new participants at the default level caused the average deferral rate to slowly decline and now level off.

Figure 3

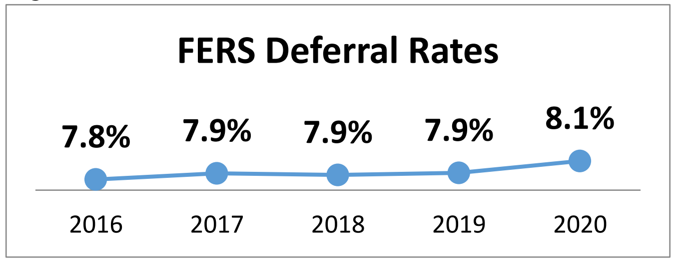
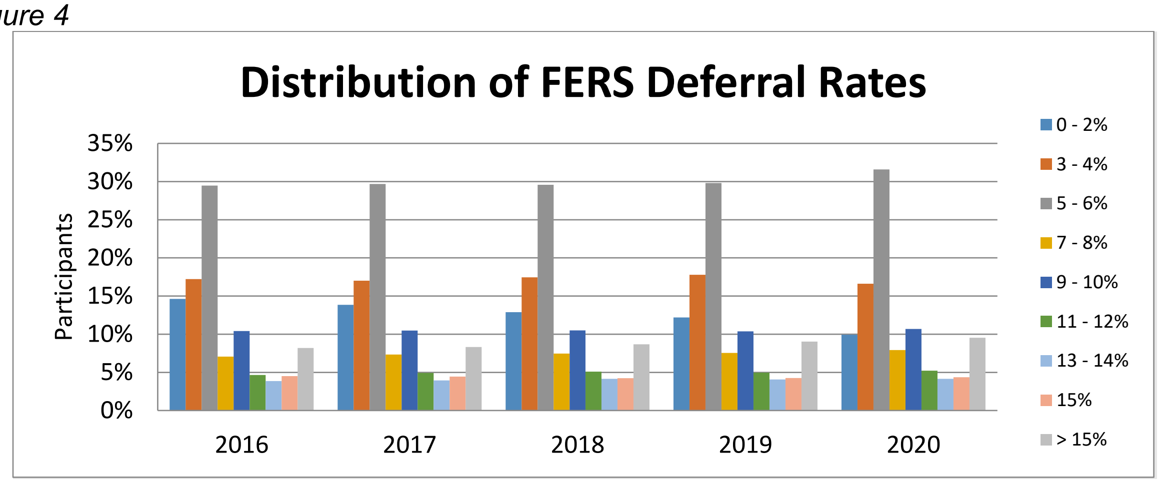


Figure 4 below illustrates the power of plan design on participant behavior. FERS participants receive dollar-for-dollar matching contributions on the first 3% of pay and 50 cents on the dollar on the next 2%. The full match is achieved with a 5% contribution. As expected, deferral rates aggregate in the 5-6% range for participants to receive the full employer match, with 31.6% of TSP contributors being in this range in 2020. The impact of automatic enrollment can clearly be seen as the percent of participants contributing 2% or less shows a steady decline while the percent at the default contribution rate of 3% has grown over the last 5 years. Still of significant note, 26.5% of participants are not receiving the full matching contribution as they are contributing less than 5%; however, this continues to decline. The percent of participants not receiving full matching contributions is expected to decrease more rapidly due to increasing the default level from 3% to 5% for all new auto-enrolled participants on October 1, 2020.

Figure 4



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[2] "For [Non-highly compensated employees], the median ADP was 6.2% . . ., while the median ADP for [highly compensated employees was 7.8%. . . ." Deloitte, Annual Defined Contribution Benchmarking Survey – Ease of Use Drives Engagement in Saving for Retirement, 2019 Edition.

[3] "The average deferral rate was 7.0% in 2019." Vanguard, How America Saves 2020.

[4] Participants auto-enrolled on or after October 1, 2020 have been enrolled at the new 5% default deferral. Participants enrolled prior to October 1st were auto-enrolled at 3%.

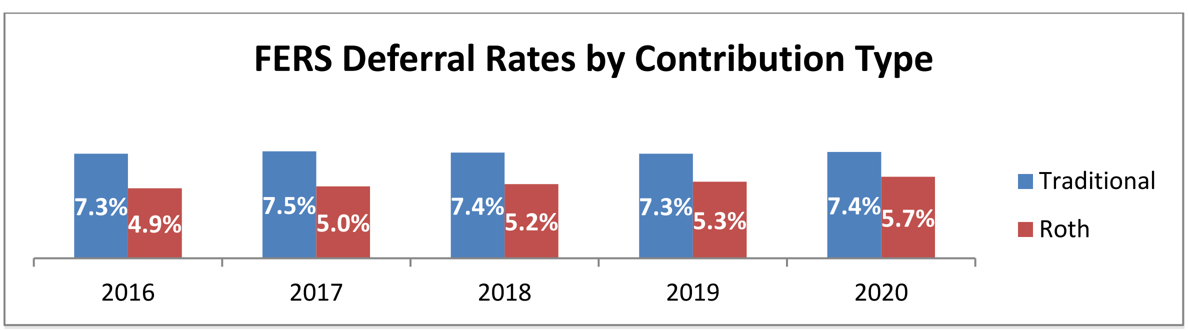
The lowest-paid participants are deferring the least, but with an average deferral rate of 6.1%, many of the lowest paid are still receiving the full match. The youngest participants have the lowest average deferral rates with deferrals steadily increasing with age. Deferral rates for all ages, and all but the lowest paid participants increased in 2020.

Table 2

Annual FERS Deferral Rates by Demographic Cohorts					
	2016	**2017**	**2018**	**2019**	**2020**
Age					
<= 29	5.3%	5.2%	5.4%	5.5%	5.8%
30 – 39	6.4%	6.4%	6.6%	6.6%	6.8%
40 – 49	7.2%	7.2%	7.3%	7.3%	7.6%
50 – 59	9.1%	9.1%	9.1%	9.1%	9.3%
60 – 69	10.0%	10.3%	10.0%	10.0%	10.2%
70+	10.8%	11.1%	10.5%	10.4%	10.5%
Salary Quintile					
Q1 Lowest Paid	5.5%	5.7%	5.9%	6.6%	6.1%
Q2 Lower Paid	7.2%	7.0%	6.9%	6.8%	7.0%
Q3 Mid-Range	8.1%	7.9%	8.1%	8.1%	8.3%
Q4 Higher Paid	8.9%	8.9%	9.0%	9.1%	9.3%
Q5 Highest Paid	9.8%	9.8%	9.8%	9.9%	10.0%

Roth TSP was introduced in May 2012, allowing paticipants to make contributions from after-tax dollars, and their earnings on those contributions to be tax-free at withdrawal (as long as certain IRS requirements are met). While the majority of participants continue to make only traditional (pre-tax) contributions, deferrals to Roth TSP are increasing. For those contributing to Roth, their average deferrals were 5.7% as opposed to the average traditional deferral of 7.4%. While the traditional deferral is holding steady, the Roth deferral has been rising. (Roth and traditional average deferral rates in Figure 5 do not include catch-up contributions which are reflected in the deferral rates shown in Figures 3 and 4.)

Figure 5



Roth deferral rates are highest among both the oldest and the highest-paid participants. However, all demographic cohorts experienced an increase in Roth deferrals in 2020.

Table 3

FERS Traditional and Roth Deferral Rates by Demographic Cohorts						
	2018		2019		2020	
	Traditional	Roth	Traditional	Roth	Traditional	Roth
Age						
<= 29	4.6%	5.1%	4.5%	5.3%	4.7%	5.7%
30 – 39	5.9%	5.1%	5.9%	5.2%	6.0%	5.6%
40 – 49	6.8%	4.7%	6.8%	4.9%	6.9%	5.2%
50 – 59	8.6%	5.4%	8.6%	5.5%	8.6%	5.9%
60 – 69	9.5%	6.4%	9.4%	6.5%	9.5%	6.9%
70+	10.2%	7.4%	10.0%	7.8%	10.0%	8.2%
Salary Quintile						
Q1 Lowest Paid	5.3%	4.8%	6.0%	5.0%	5.5%	5.2%
Q2 Lower Paid	6.4%	5.0%	6.3%	5.0%	6.4%	5.3%
Q3 Mid-Range	7.5%	5.3%	7.5%	5.5%	7.6%	5.9%
Q4 Higher Paid	8.5%	5.6%	8.4%	5.8%	8.5%	6.1%
Q5 Highest Paid	9.4%	5.4%	9.4%	5.7%	9.4%	6.0%

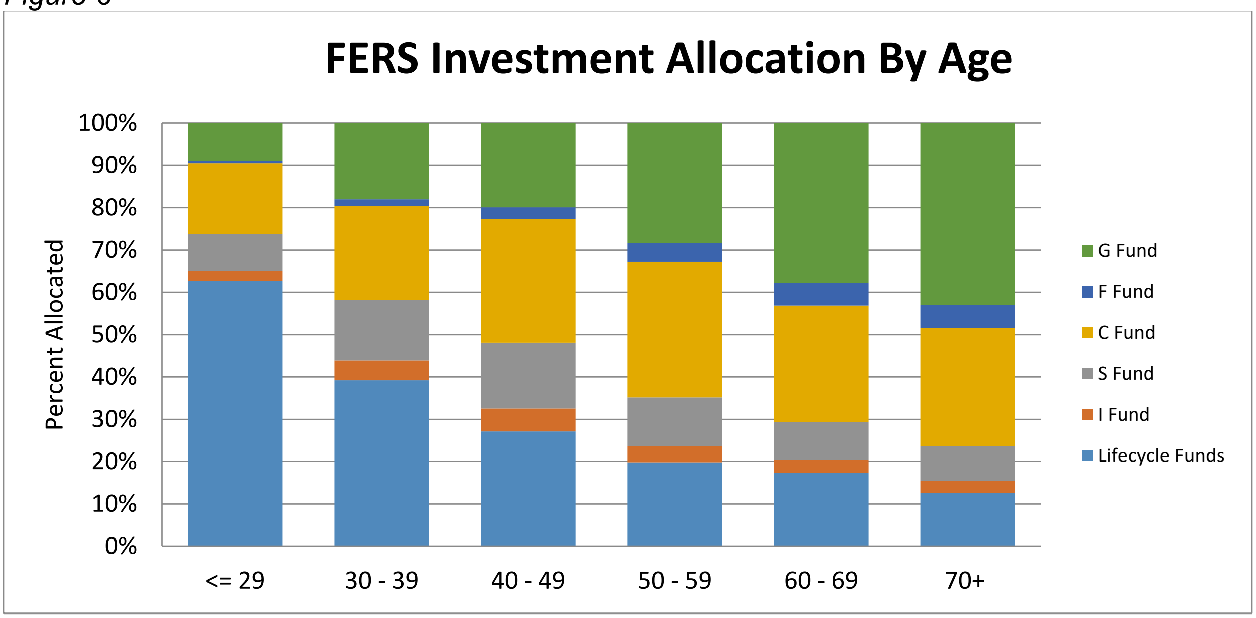
Investment Allocation

Until September 2015, contributions for automatically enrolled participants were defaulted into the Government Securities Investment (G) Fund. With the passage of the Smart Savings Act, Public Law 113-255, the default investment fund for new participants changed from the G Fund to an age-appropriate Lifecycle (L) Fund. 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.

*The youngest participants who have the longest time horizon to reap the benefits of compounding returns have **9%** of their assets invested in the G Fund, a continual and significant decline from previous years.*

Figure 6 shows older participants have higher allocations to the G Fund than younger participants. This behavior is consistent with the expectation that participants tend to shift their investment allocation toward the relative safety of guaranteed/income producing assets as they approach retirement age. This is also a significant improvement from 2014 when the youngest participants held 41.7% of their assets in the G Fund.

Figure 6



As noted in Table 4, the lowest-paid participants have approximately 35.6% allocated to the G fund as compared to the highest paid who allocated only 22.6% to the G Fund. Though the lower-paid continue to decrease, the percent of assets allocated to the G Fund increased compared to 2019 for the highest-paid.

When examining L Fund allocations, the youngest age cohort had the highest level of usage at 62.6%, which continues to increase each year. The oldest cohort has the lowest level of L Fund usage at 12.6%, however, this has also increased slightly each year. When compared to 2019, allocations for the C and S funds increased for all cohorts except for the youngest cohort’s allocation to the S fund which dropped slightly. This is likely due to better market returns in 2020 compared to 2019 and the corresponding decrease in G Fund allocations. Increases in L

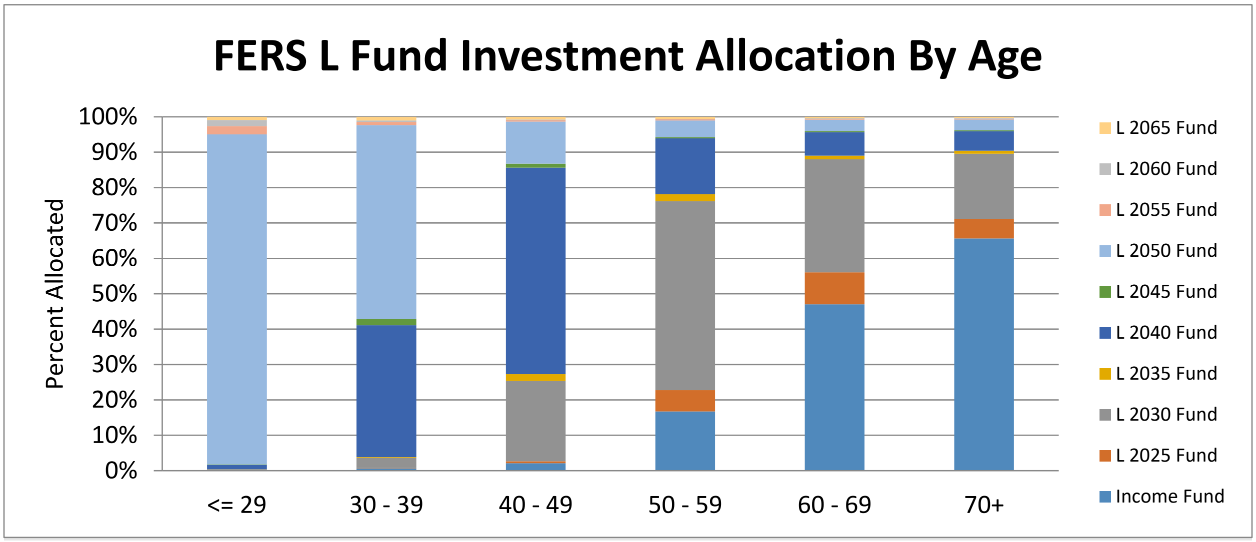
Fund utilization is likely influenced by the default investment changing from the G Fund to an age-appropriate L Fund in 2015 and the impact of ongoing communications regarding the benefits of utilizing the L Funds.

Table 4

2020 Investment Allocations by Demographic Cohorts						
	G Fund	**F Fund**	**C Fund**	**S Fund**	**I Fund**	**L Funds**
Age						
<= 29	9.0%	0.6%	16.7%	8.8%	2.4%	62.6%
30 – 39	18.0%	1.6%	22.2%	14.3%	4.7%	39.2%
40 – 49	19.9%	2.8%	29.2%	15.5%	5.4%	27.2%
50 – 59	28.4%	4.4%	32.1%	11.5%	3.9%	19.8%
60 – 69	37.8%	5.3%	27.5%	9.0%	3.1%	17.3%
70+	43.1%	5.4%	27.9%	8.2%	2.8%	12.6%
Salary Quintile						
Q1 Lowest Paid	35.6%	2.5%	20.0%	9.0%	3.0%	30.0%
Q2 Lower Paid	37.2%	3.7%	28.9%	10.1%	3.2%	17.0%
Q3 Mid-Range	28.9%	3.3%	26.4%	12.6%	4.1%	24.8%
Q4 Higher Paid	25.3%	3.7%	28.5%	13.8%	4.4%	24.3%
Q5 Highest Paid	22.6%	4.5%	33.2%	12.5%	4.6%	22.7%

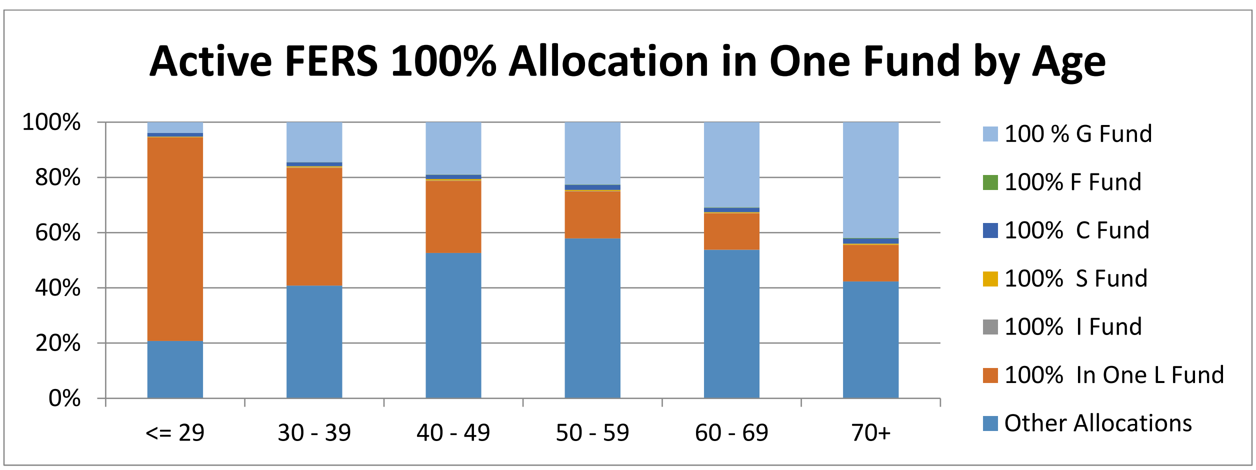
In July 2020, TSP launched 6 additional L Funds and retired the L 2020 Fund. These new L Funds added 5-year L Funds up to the L 2065 Fund and added the L 2060 Fund. Prior to July 2020, the TSP has 5 L Funds in 10 year increments. The L 2020 Fund, having reached its termination point, merged with the L Income Fund. Of the participants utilizing the L Funds, the allocation is largely as we would expect. Those in the age 29 and under cohort were taking advantage primarily of the L2050 Fund. Very few transferred to the new L 2055, L 2060 and L 2065 Funds; however, new participants under 30 were auto-enrolled into these new funds. Participants who would likely retire between 2034 and 2044 (the 40-49 age group) were in the L2040 Fund. The age 50-59 cohort was aggregated in the L2030 Fund. Participants aged 60-69 invested in the L2020 Fund were rolled into the L Income Fund, where 47% have allocated their assets. Those 70 and over were split between the L 2020 and the L Income Fund in 2019, but in the current year, 65% of their assets are in the L Income Fund. See Figure 7.

Figure 7



As shown in Figure 8, the use of one L Fund is most common with the two youngest age cohorts – 73.7% for those age 29 and under and 42.7% for those age 30 to 39. The use of a single L Fund has been increasing each year among the younger cohorts. While the percent of participants who invest solely in a singular Core Fund is minor, the most common fund used alone is the G Fund. As participants age, they are more likely to be solely invested in the G Fund. Investing solely in the G Fund is problematic for any age as the G Fund cannot keep up with inflation. If not invested in a single L Fund, participants are most likely allocating across multiple funds. Since 2014, the most significant change has been seen in the younger age groups where there was a meaningful increase in the number solely invested in one L fund and a decrease in the percentage solely invested in the G fund. This was influenced by the change to an age-appropriate L fund as the default investment in 2015. See Figure 8.

Figure 8

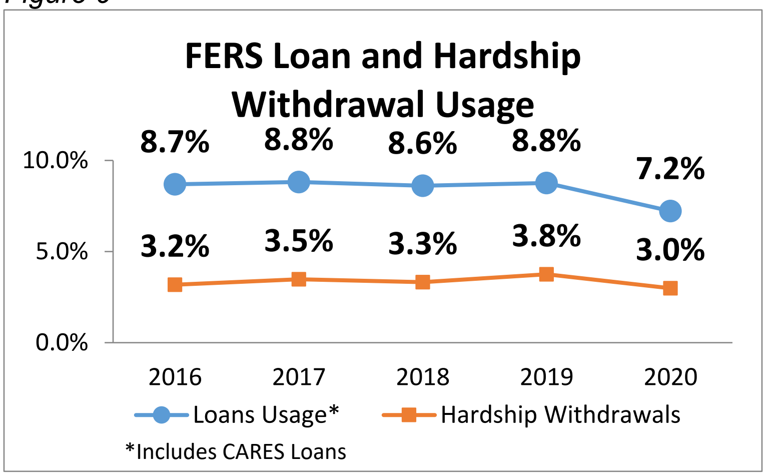


Loan and Hardship Withdrawal Usage

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 for the purchase of a primary residence 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, up to $50,000, and the minimum loan amount is $1,000. With the CARES Act, loan amounts were temporarily increased to $100,000 for those affected by COVID-19 through December 31. 2020.

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; the minimum withdrawal amount is $1,000 and includes a 10% early withdrawal penalty if the participant is younger than 59 ½.

Figure 9

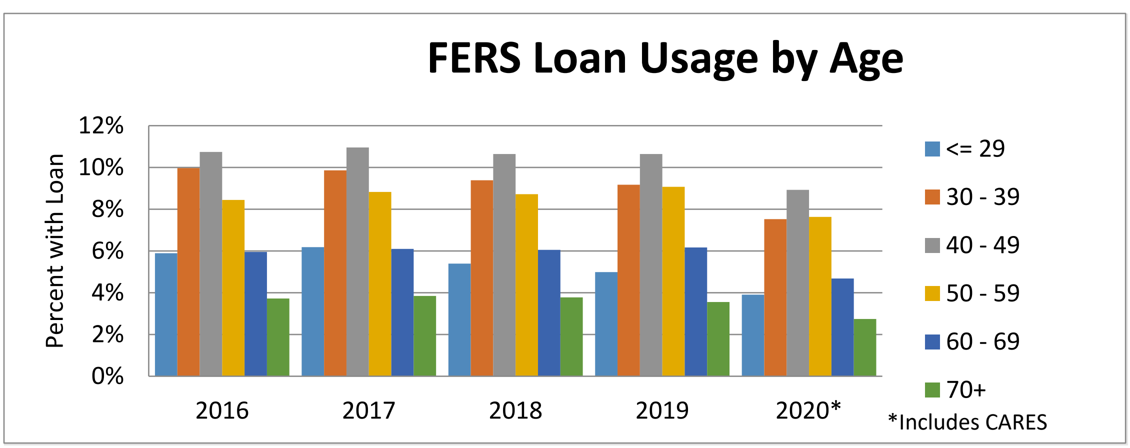


Loan usage overall remained somewhat steady in previous years around 8.7% but declined 1.5 percentage points in 2020 to 7.2%. Even with the pandemic altering the U.S. economy, fewer participants took loans.

Hardship withdrawals slightly increased in 2019 but has dropped to a new low of 3% in 2020.

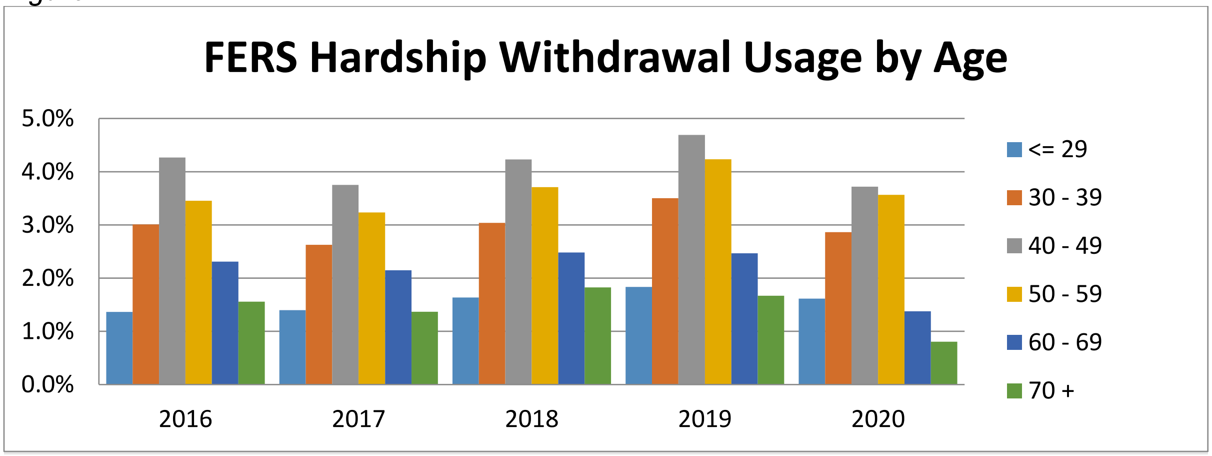
As seen in Figure 10, loan usage significantly dropped among all age groups. However, usage remains the highest among the 40-49 age cohort, with 8.9% of the participants in this cohort receiving a loan in 2020. Differing from prior years, usage among participants aged 50-59 was higher than those aged 30-39, 7.6% and 7.5% respectively. Loan utilization among the oldest and youngest cohorts dropped nearly a percentage point from 2019 levels.

Figure 10



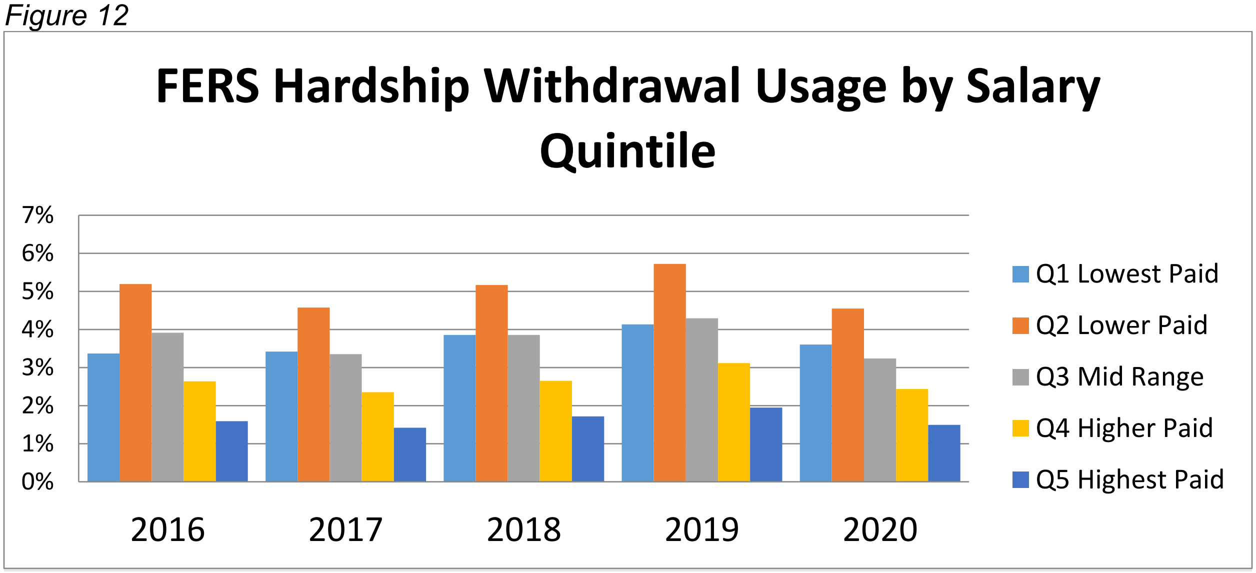
Hardship withdrawal usage is also consistently highest among the age 40-49 cohort: 3.7%; however, the 50-59 cohort usage is only 0.1 percentage points lower. All cohorts saw a decrease in hardship withdrawals with the youngest cohort experiencing the smallest drop of only 0.2 percentage points.

Figure 11



Hardship withdrawal usage continues its stair-step pattern among the salary quintiles, with usage generally declining as salary levels increase. See Figure 12. 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. In 2020, the second salary quintile had the highest usage rate at 4.6%, which is 1.1% percent drop from 2019 levels and a 2% drop from the peak in 2013. Hardship withdrawal usage in 2020 is lower for all salary groups than in 2019.

Figure 12



Summary

The analysis reveals that the TSP, through calendar year 2020, did not experience many unusual shifts in participant activity. Participation continues to slowly increase, largely benefiting from the impact of automatic enrollment and the elimination of the 6-month contribution suspension when a participant takes a hardship withdrawal. Higher percentages of the participant population are taking advantage of the Lifecycle Funds, whether because of auto-enrollment or individual choice, while loans and hardship withdrawals experienced a decline from 2019 levels. Deferral rates have increased slightly and 81% of auto-enrolled participants are making changes to their default enrollment. The TSP implemented a change to the default deferral rate from the 3% to 5% on October 1, 2020, with the expectation that this change will improve the long-term retirement outcomes for a significant segment of the TSP population. For those enrolled prior to October 2020, remaining at the default 3% left matching employer contributions on the table.