Thrift Savings Plan

Participant Behavior and Demographics (FERS)

Analysis of 2017 – 2021

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 2021 data is similar to analysis of data conducted in the previous year.

As with the 2020 report, the 2021 analysis will focus solely on participants in the Federal Employee Retirement System (FERS). 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 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.). Like 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*). The L Funds are custom target-date funds, provided in five-year intervals, invested exclusively in the G, F, C, S, and I Funds. TSP added six additional funds, and retired the L 2020 Fund, on July 1, 2020.

During the period covered by this report, the TSP underwent two major plan design changes: in January 2018, the Blended Retirement System (BRS) was implemented, and on October 1, 2020, TSP raised the default deferral rate to 5% from 3%. BRS implementation analysis will not be covered in this report as it is a separate system from FERS.

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 2020 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. The effect is that the average deferral rate (calculated using a smaller denominator) will be higher using this methodology but 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 hold 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 compared to reports prior to 2016. Since this group is likely to participate and contribute at lower rates than full-time employees, its inclusion will also likely result in lower estimated participation and contribution rates (versus an analysis including only full-time employees), particularly for 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.

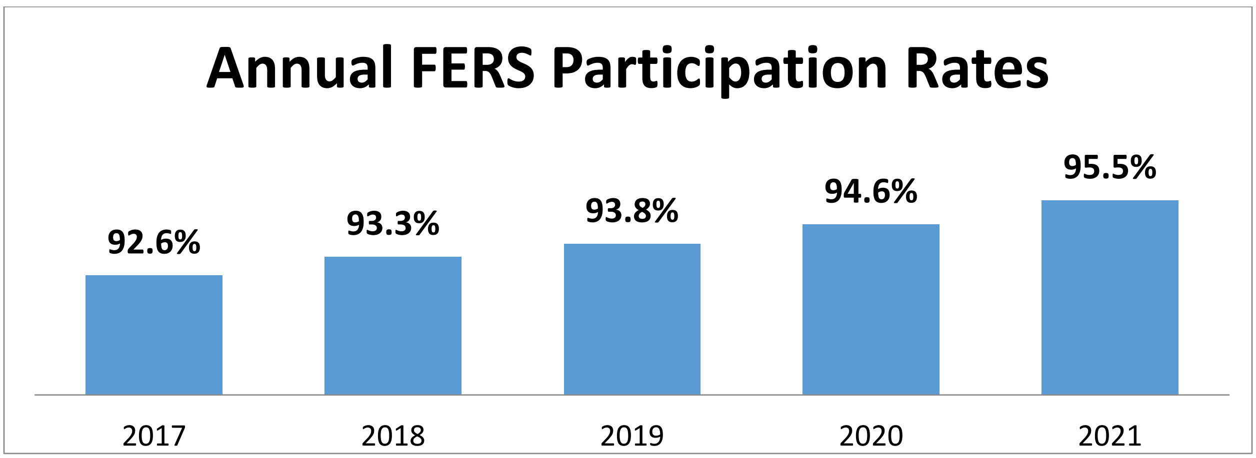
Analysis

The following sections of this report examine the behaviors of FERS participants across a five-year timeframe ending December 31, 2021, and through the lens of two demographic filters – age and salary. The graphics and narratives summarize 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 95.5% at the end of 2021, a 0.9 percentage point increase over 2020 participation levels. Figure 1 illustrates the steady improvement in the participation rate since the implementation of automatic enrollment for new hires in 2010. The automatic enrollment policy automatically defers 5%[1] of new employees' salaries into the TSP unless the employee makes an active election 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. Reversing historical precedent, 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. See Table 1 below. 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 7.6 percentage point difference in 2017 versus 3.8 percentage points in 2021.

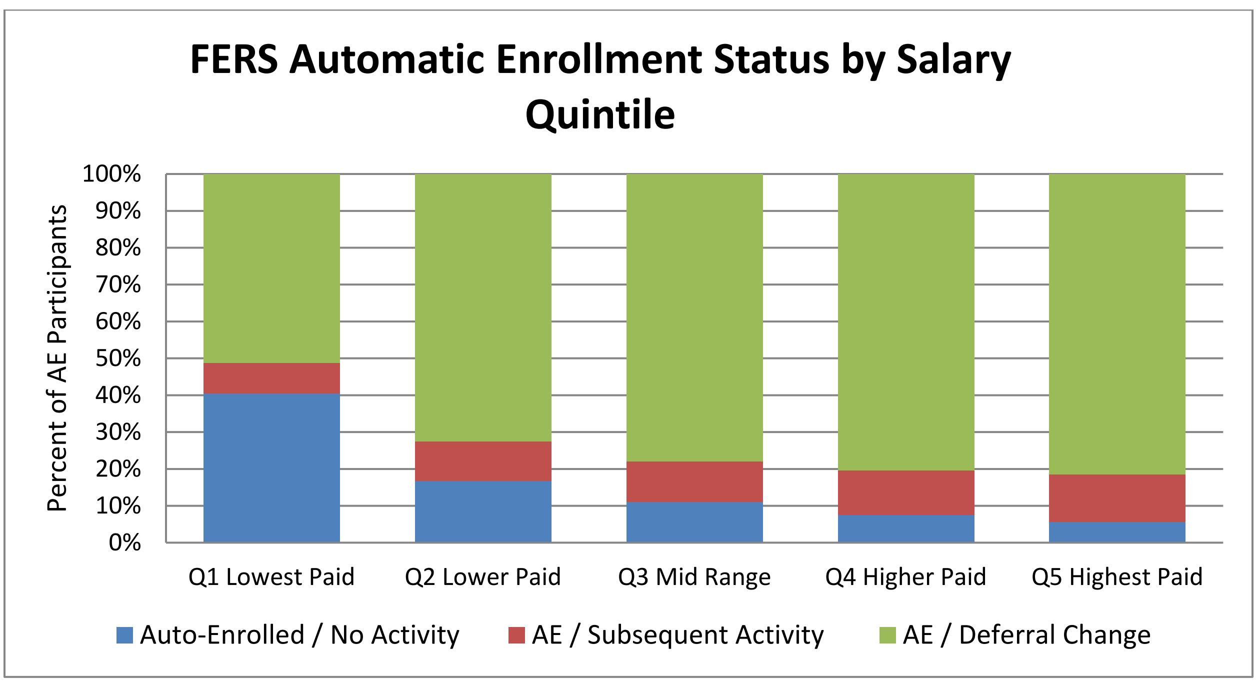
[1] Default deferral rate for automatically enrolled participants increased from 3% to 5% on October 1, 2020.

Table 1

Annual FERS Participation Rates by Demographic Cohorts					
	2017	**2018**	**2019**	**2020**	**2021**
Age					
<= 29	96.5%	97.1%	97.0%	97.3%	97.7%
30 – 39	94.6%	95.3%	95.7%	96.2%	97.1%
40 – 49	92.1%	92.9%	93.6%	94.6%	95.8%
50 – 59	91.5%	92.2%	92.7%	93.5%	94.6%
60 – 69	90.8%	91.4%	91.9%	92.6%	93.3%
70+	87.7%	87.6%	88.2%	88.6%	89.6%
Salary Quintile					
Q1 Lowest Paid	91.5%	92.5%	92.9%	93.8%	94.9%
Q2 Lower Paid	89.1%	90.1%	91.1%	92.2%	93.9%
Q3 Mid-Range	90.8%	91.3%	91.7%	92.9%	93.9%
Q4 Higher Paid	94.7%	94.9%	95.2%	95.7%	96.4%
Q5 Highest Paid	96.7%	96.9%	97.0%	97.4%	97.7%

In summary, auto-enrollment has been impactful in increasing participation rates, with approximately 1.6% of auto- enrolled participants opting out of making contributions. In addition, auto-enrolled participants have demonstrated a relatively high degree of engagement with the TSP; 79% have actively made deferral changes, interfund transfers or other transactions since entering the Plan. However, as shown in figure 2, the 21% who have made no change since being auto-enrolled are mostly in the lowest salary quintiles.

Figure 2



Deferral Rates

The FERS average deferral rate (ADP) (includes employee Roth, traditional and catch-up contributions) has previously leveled around 7.9%; however, it has steadily increased since 2019 (see figure 3). The FERS deferral rate exceeds the 7.1% ADP of other defined contribution plans according to Deloitte[2] and the 7.2% 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 likely a side effect of automatic enrollment. While auto-enrollment increased the participation rate by including many new participants who would not otherwise have been participating, many auto-enrolled participants have continued to contribute at the 3% or 5% default level. The increase in new participants at the default level caused the average deferral rate to slowly decline; however, the increase in the default deferral rate in 2020 from 3% to 5% has caused the average deferral rate to begin increasing.

Figure 3

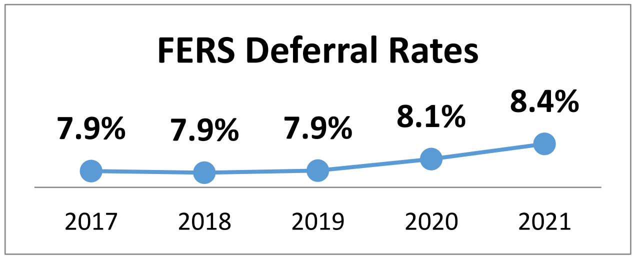
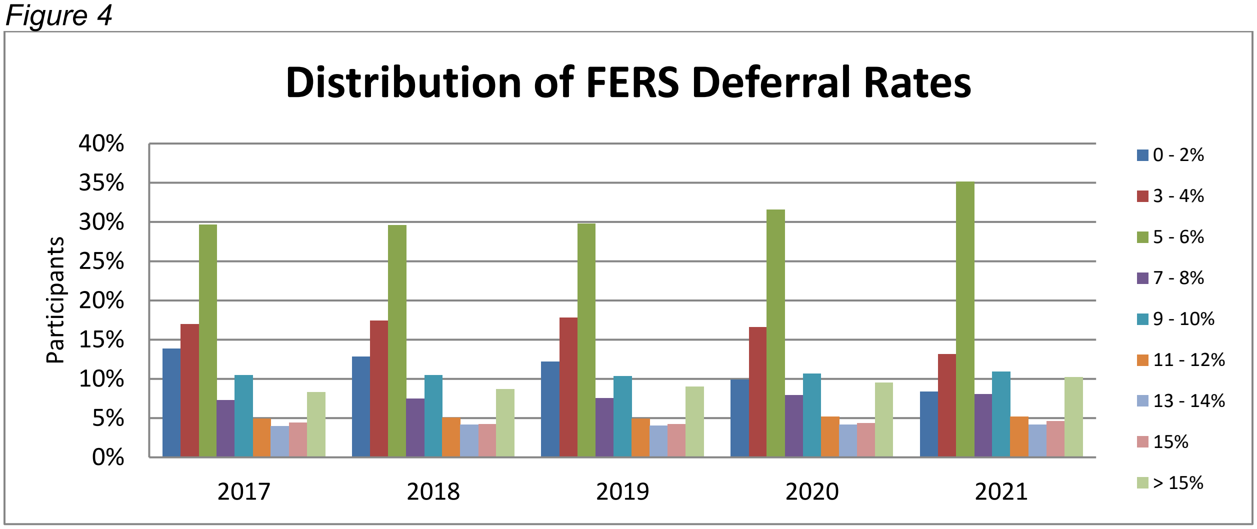


Figure 4 below illustrates the power of plan design on participant behavior. FERS participants receive dollar-for-dollar matching contributions on the first 3% of pay and 50 cents on the dollar on the next 2%. The full match is achieved with a 5% contribution. Consequently, deferral rates aggregate in the 5-6% range, with 35.2% of TSP contributors being in this range in 2021. 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% grew. With the default rate increasing to 5% in October 2020, there is a decline of those contributing at 3% or less and an increase in those contributing 5-6%. Still of significance, 21.5% of participants are not receiving the full matching contribution as they are contributing less than 5%. This is a decrease of 5 percentage points from 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 7.2% in 2020." Vanguard, How America Saves 2021.

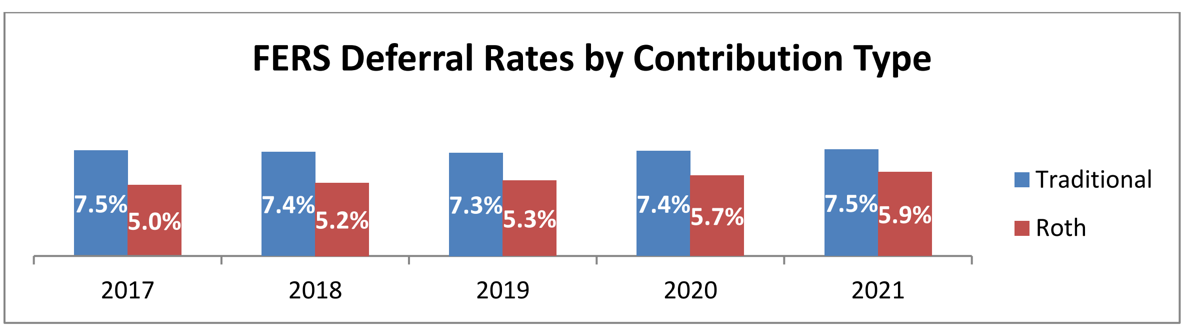
The lowest-paid participants are deferring the least – 3.7 percentage points less than the highest paid. This interval is again shrinking after expanding in 2020. The interval between the lowest and highest paid employees is similar to the interval in 2018. However, with an average deferral rate of 6.5%, 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 each age bracket. Deferral rates for all ages and salaries increased in 2021 over 2020. See Table 2.

Table 2

Annual FERS Deferral Rates by Demographic Cohorts					
	2017	2018	2019	2020	2021
Age					
<= 29	5.2%	5.4%	5.5%	5.8%	6.2%
30 – 39	6.4%	6.6%	6.6%	6.8%	7.1%
40 – 49	7.2%	7.3%	7.3%	7.6%	7.8%
50 – 59	9.1%	9.1%	9.1%	9.3%	9.5%
60 – 69	10.3%	10.0%	10.0%	10.2%	10.3%
70+	11.1%	10.5%	10.4%	10.5%	10.6%
Salary Quintile					
Q1 Lowest Paid	5.7%	5.9%	6.6%	6.1%	6.5%
Q2 Lower Paid	7.0%	6.9%	6.8%	7.0%	7.1%
Q3 Mid-Range	7.9%	8.1%	8.1%	8.3%	8.7%
Q4 Higher Paid	8.9%	9.0%	9.1%	9.3%	9.5%
Q5 Highest Paid	9.8%	9.8%	9.9%	10.0%	10.2%

Roth TSP was introduced in May 2012, allowing paticipants to make contributions from after-tax dollars, and for 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 5.9%, versus the average traditional deferral rate of 7.5%. While the traditional deferral rate has remained in the 7.3-7.5% range since 2017, the Roth deferral has been rising. (Note: 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 our oldest participants. However, almost all demographic cohorts experienced an increase in Roth deferrals in 2021 over 2020. (See Table 3.)

Table 3

FERS Traditional and Roth Deferral Rates by Demographic Cohorts						
	2019		2020		2021	
	Traditional	Roth	Traditional	Roth	Traditional	Roth
Age						
<= 29	4.5%	5.3%	4.7%	5.7%	5.1%	5.9%
30 – 39	5.9%	5.2%	6.0%	5.6%	6.1%	5.9%
40 – 49	6.8%	4.9%	6.9%	5.2%	7.1%	5.5%
50 – 59	8.6%	5.5%	8.6%	5.9%	8.7%	6.0%
60 – 69	9.4%	6.5%	9.5%	6.9%	9.5%	7.1%
70+	10.0%	7.8%	10.0%	8.2%	10.0%	8.3%
Salary Quintile						
Q1 Lowest Paid	6.0%	5.0%	5.5%	5.2%	5.8%	5.6%
Q2 Lower Paid	6.3%	5.0%	6.4%	5.3%	6.3%	5.6%
Q3 Mid-Range	7.5%	5.5%	7.6%	5.9%	7.8%	6.2%
Q4 Higher Paid	8.4%	5.8%	8.5%	6.1%	8.6%	6.4%
Q5 Highest Paid	9.4%	5.7%	9.4%	6.0%	9.5%	6.1%

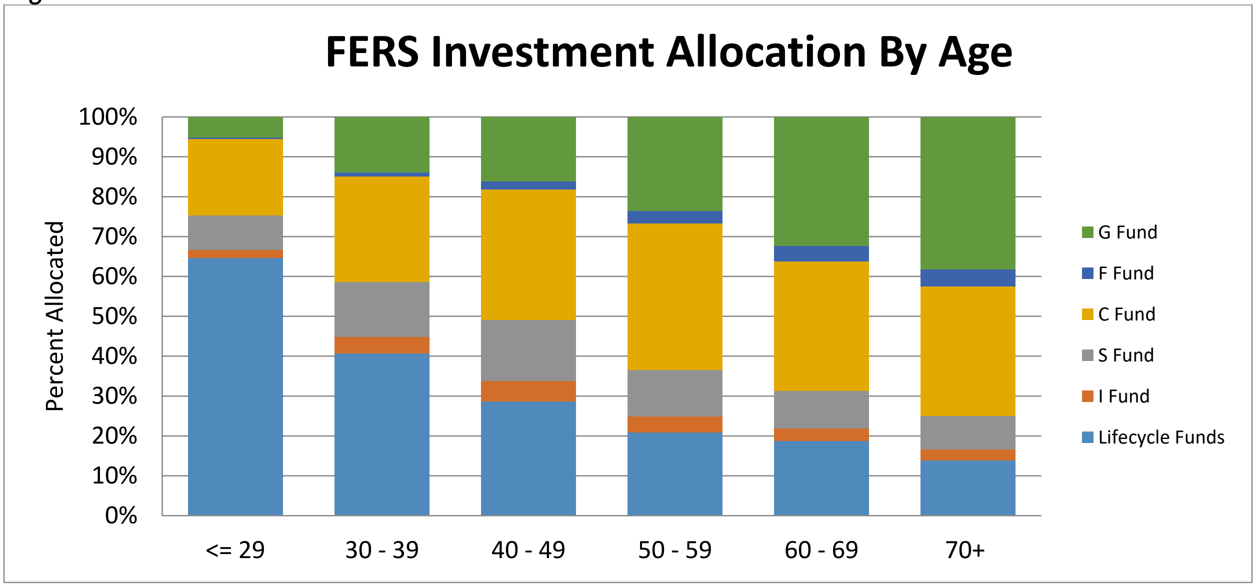
Investment Allocation

The youngest participants who have the longest time horizon to reap the benefits of compounding returns have ***5%*** *of their assets invested in the G Fund. This is a continual and significant decline from previous years.*

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.

In Figure 6, we note that allocations to the G Fund increase as the age of the TSP's population increases, with the youngest participants only holding 5% of their assets in the G Fund. 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 29.5% allocated to the G fund; this contrasts with the highest paid, who allocated only 18.4% to the G Fund in 2021. All cohorts have decreased their investment in the G Fund compared to both 2019 and 2020 investment allocations.

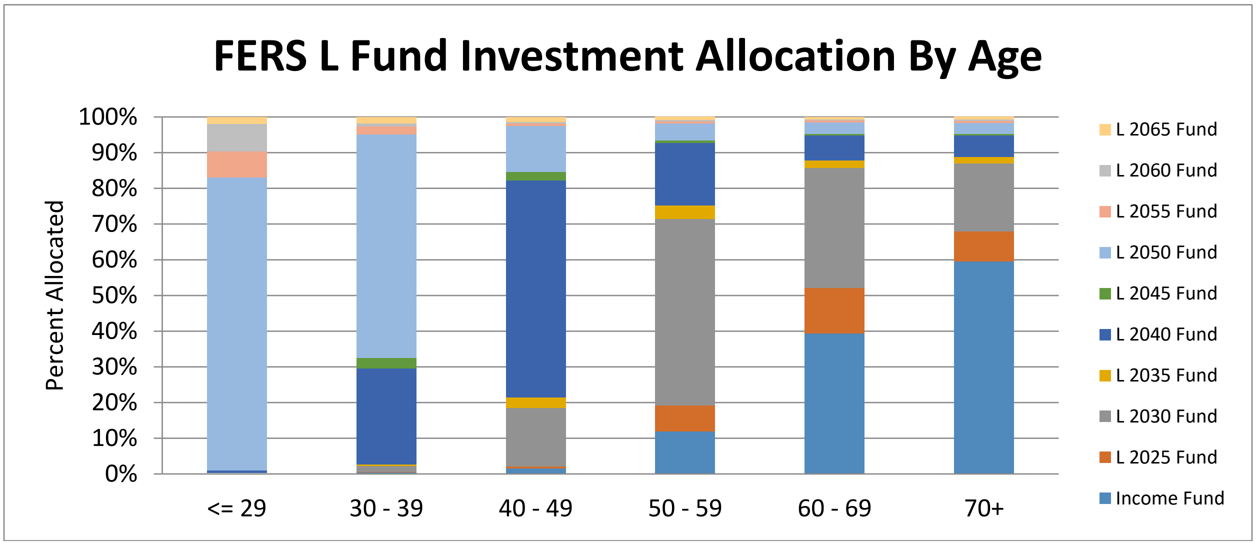
When examining L Fund allocations, the youngest age cohort had the highest level of utilization at 64.6%, which continues to increase each year. The oldest cohort has the lowest level of L Fund utilization at 13.9%; this has also increased slightly each year. Increases in L Fund utilization is likely influenced by the default investment changing from the G Fund to an age-appropriate L Fund in 2015, as well as the impact of ongoing communications regarding the benefits of utilizing the L Funds.

Table 4

2021 Investment Allocations by Demographic Cohorts						
	G Fund	**F Fund**	**C Fund**	**S Fund**	**I Fund**	**L Funds**
Age						
<= 29	5.1%	0.4%	19.3%	8.6%	2.1%	64.6%
30 – 39	13.9%	1.1%	26.4%	13.8%	4.2%	40.6%
40 – 49	16.2%	2.0%	32.7%	15.3%	5.2%	28.6%
50 – 59	23.5%	3.2%	36.6%	11.8%	3.9%	20.9%
60 – 69	32.3%	4.0%	32.4%	9.4%	3.2%	18.7%
70+	38.1%	4.3%	32.6%	8.4%	2.7%	13.9%
Salary Quintile						
Q1 Lowest Paid	29.5%	1.8%	22.4%	9.0%	2.9%	34.5%
Q2 Lower Paid	32.1%	2.8%	33.2%	10.3%	3.2%	18.5%
Q3 Mid-Range	24.3%	2.4%	30.5%	12.6%	4.0%	26.3%
Q4 Higher Paid	20.9%	2.6%	33.0%	13.8%	4.3%	25.4%
Q5 Highest Paid	18.4%	3.3%	37.5%	12.6%	4.6%	23.6%

As discussed earlier, TSP launched 6 additional L Funds and retired the L 2020 Fund in July 2020. These new L Funds added 5-year L Funds up to the L 2065 Fund and added the L 2060 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 assets into to the new L 2055, L 2060, and L 2065 Funds. However, utilization of the new L Funds (L 2055, L 2060, L 2065) increased for the youngest participants over 2020 levels. Participants who would likely retire between 2035 and 2045 (the 40-49 age group) were in the L 2040 Fund, as we would expect for to retirement investment. The age 50-59 cohort was aggregated in the L 2030 Fund. Participants aged 60 and older have their assets split between the L Income and L 2030 funds. Participants aged 60-69 are roughly evenly split between the two funds, while participants aged 70 and over are mostly in the L Income fund.

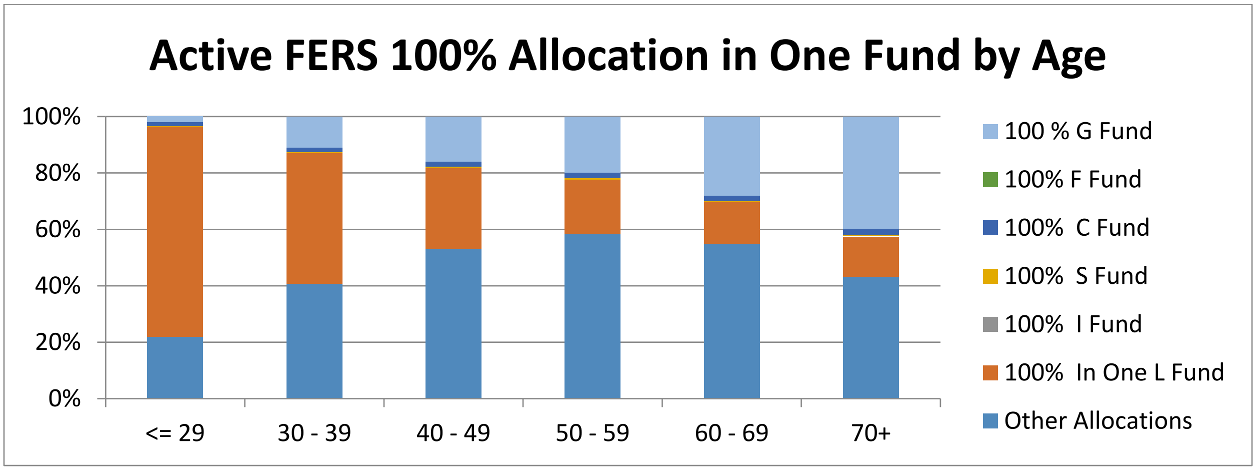
Figure 7



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 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 – 74.4% for those age 29 and under and 46.2% 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. See Figure 8.

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 likely influenced by the change to an age-appropriate L fund as the default investment in 2015.

Figure 8

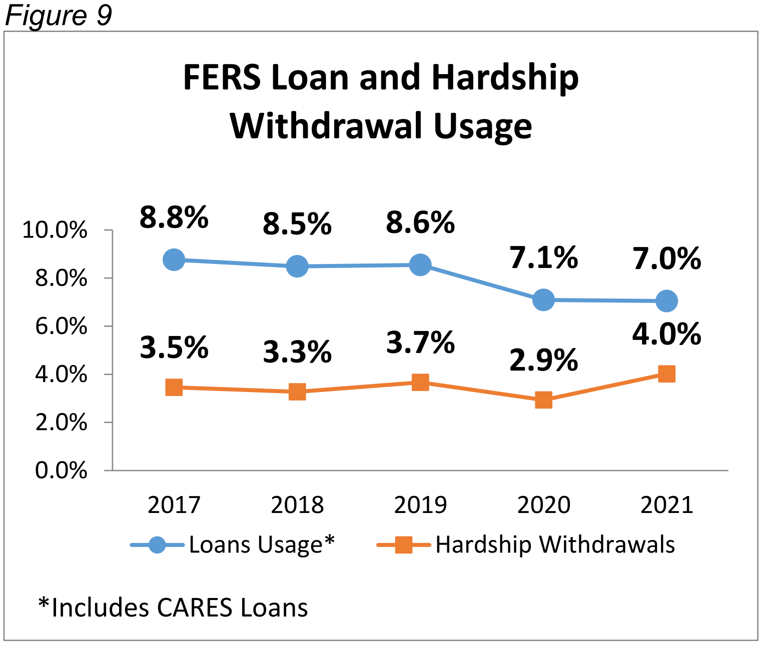


Loan and Hardship Withdrawal Usage

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. In 2021, 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.

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, with a 10% early withdrawal penalty if the participant is younger than 59 ½.

Figure 9

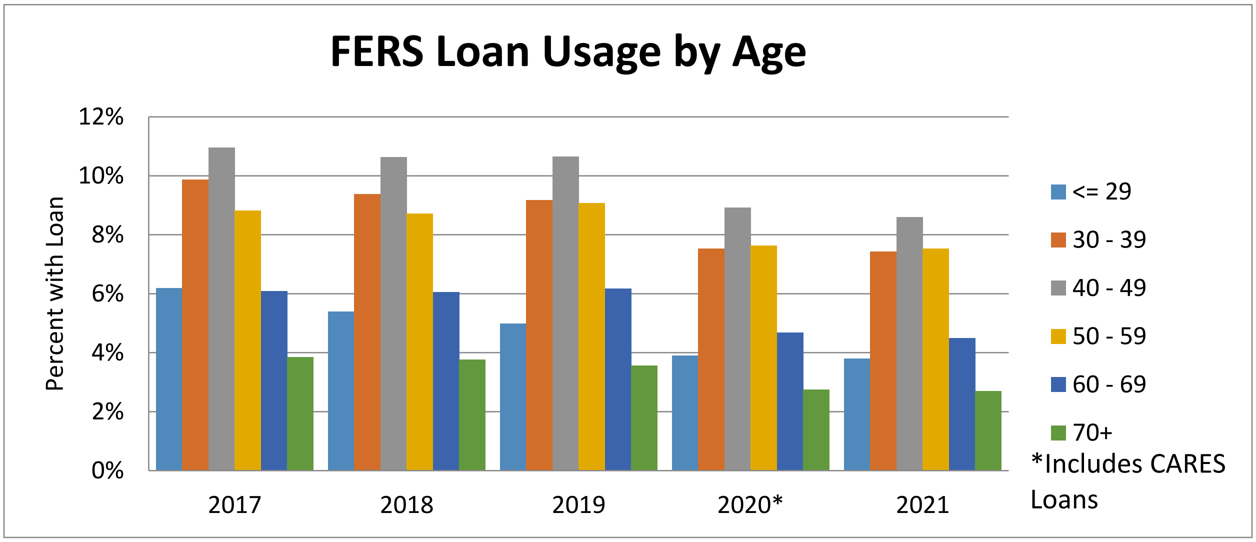


Loan usage overall remained somewhat steady in previous years around 8.7%, but declined 1.5 percentage points in 2020, and has remained low in 2021. Even with the pandemic altering the U.S. economy, fewer participants took loans.

Hardship withdrawals have returned to slightly higher levels than those seen before the pandemic began. Four percent of participants took a hardship withdrawal in 2021.

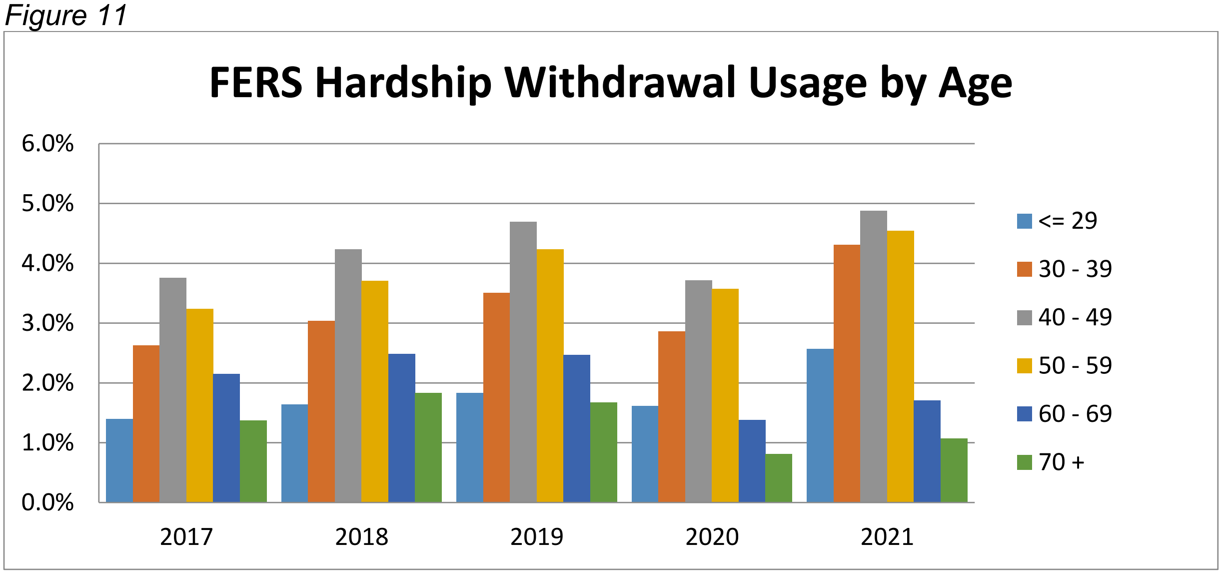
As seen in Figure 10, loan usage mirrors 2020 levels among all age groups. However, usage remains the highest among the 40-49 age cohort, with 8.6% of the participants in this cohort receiving a loan in 2021. Usage among participants aged 50-59 was higher than those aged 30-39, 7.5% and 7.4% respectively; this was a flip from prior years.

Figure 10



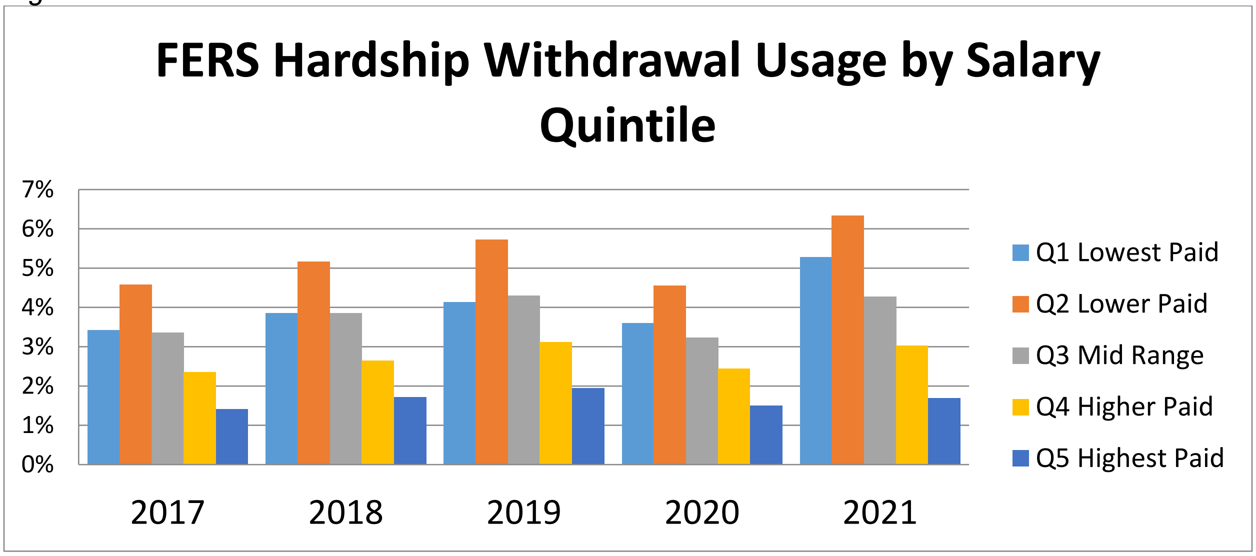
Hardship withdrawal usage is also consistently highest among the 40-49 and 50-59 age cohorts (4.9% and 4.5%, respectively). All cohorts saw an increase over 2020 levels as usage mirrors 2019 levels. (See Figure 11.)

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 (5.3%) for the lowest paid participants is higher than their loan usage (3.8%). In previous years, hardship usage has typically been lower than loan usage for all cohorts.

Figure 12



Summary

An analysis of TSP participant data from 2017 to 2021 reveals that the TSP did not experience any unusual shifts in participant activity. Participation continues to slowly increase, likely 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. Though loan and hardship withdrawals increased in 2021 compared to 2020, their usage mirrored 2019 levels. Deferral rates have increased slightly, and only 21% of auto-enrolled participants are making no change from their default enrollment. The TSP implemented a change to the default deferral rate from 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.