Thrift Savings Plan

Participant Behavior and Demographics (FERS)

Analysis of 2018 – 2022

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 2022 data is similar to analysis of data conducted in the previous year.

As with the 2021 report, the 2022 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 five-year period covered by this report, the TSP underwent a few 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%. Additionally, on June 1st, 2022, FRTIB changed recordkeeper; one of the changes allowed for participants to be able to take out a second General-Purpose Loan. Please note that 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 previous reports, 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.
>
> In 2022, the automatic enrollment status codes which were previously used for this report were discontinued. Instead, this report looks at TSP status codes which is directly provided by the agency payroll offices instead of derived based on accounts. Because of the new data source, year over year comparison is advised against.

Analysis

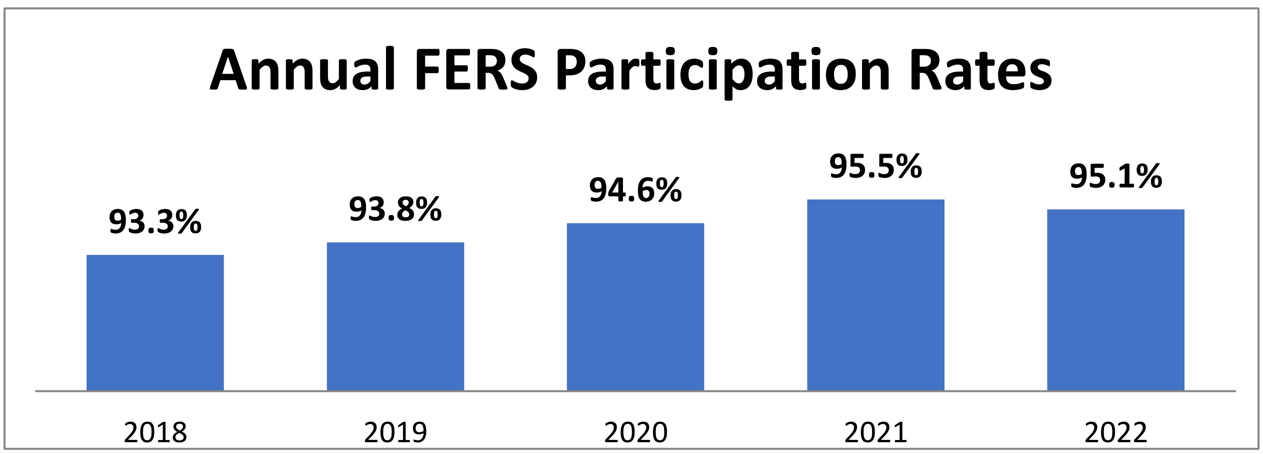
The following sections of this report examine the behaviors of FERS participants across a five-year timeframe ending December 31, 2022, and through the lens of two demographic filters – age and salary. The graphics and narratives summarize the relationships between these demographic factors and participant behaviors associated with participation and automatic enrollment, deferral rates, investment allocation, and loan and hardship withdrawal usage.

Plan Participation

As of December 31, 2022, there were 3,901,387 FERS participants with a traditional account and 916,713 participants with a Roth account. The average account balance for traditional accounts was $157,325 and the average account balance for Roth accounts was $21,784.

The FERS participation rate dropped by a 0.4 percentage point year over year, with a participation rate of 95.1% at the end of 2022. Figure 1 illustrates the improvement and then 95% plateau 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 or to lower the contribution amount.

Figure 1



Automatic enrollment has also led to 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. The gap in participation rates between the highest paid and lowest paid increased year over year with a 2.9 percentage point gap in 2021 versus a 3.7 percentage point gap in 2022 but is still below the 4.4 percentage point difference we saw in 2018.

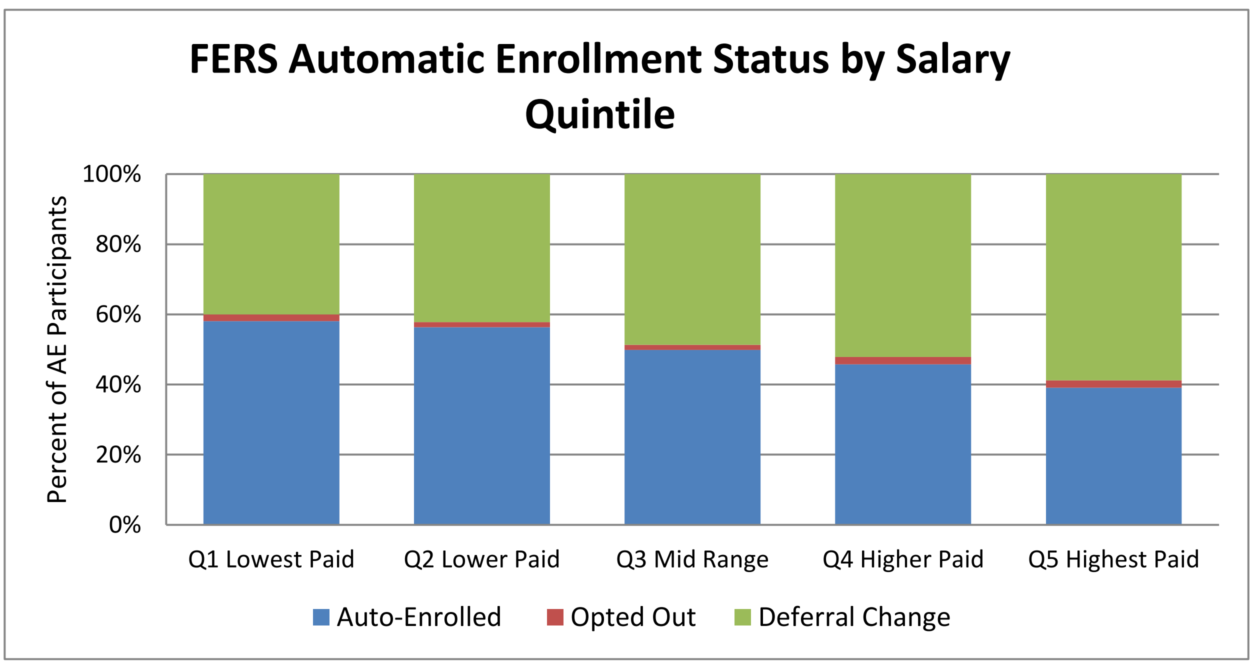
[1] Default deferral rate for automatically enrolled participants increased from 3% to 5% on October 1, 2020.

Table 1

Annual FERS Participation Rates by Demographic Cohorts					
	2018	**2019**	**2020**	**2021**	**2022**
Age					
<= 29	97.1%	97.1%	97.3%	97.7%	96.7%
30 – 39	95.3%	95.7%	96.2%	97.1%	96.5%
40 – 49	92.9%	93.7%	94.6%	95.8%	95.5%
50 – 59	92.2%	92.7%	93.5%	94.6%	94.5%
60 – 69	91.4%	91.9%	92.6%	93.3%	93.3%
70+	87.6%	88.2%	88.6%	89.6%	89.7%
Salary Quintile					
Q1 Lowest Paid	92.5%	92.9%	93.8%	94.9%	93.8%
Q2 Lower Paid	90.1%	91.1%	92.2%	93.9%	93.6%
Q3 Mid-Range	91.3%	91.7%	92.9%	93.9%	94.1%
Q4 Higher Paid	94.9%	95.2%	95.7%	96.4%	96.3%
Q5 Highest Paid	96.9%	97.0%	97.4%	97.8%	97.5%

Auto-enrollment has been impactful in increasing participation rates, with each salary quintile only having 2% or less of participants opting out of making contributions. In addition, auto-enrolled participants have demonstrated a relatively high degree of engagement with the TSP particularly with the highest salary where 59% of the group made a deferral rate change. There are still plenty of participants who do not make any change after auto-enrollment, particularly in the lowest paid quintile where 58% of participants made no change from the 5% auto-deferral rate.

Figure 2



Deferral Rates

The FERS average deferral percentage 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 7.3% 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 increase again.

Figure 3

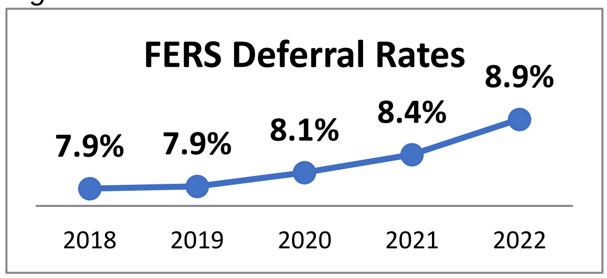
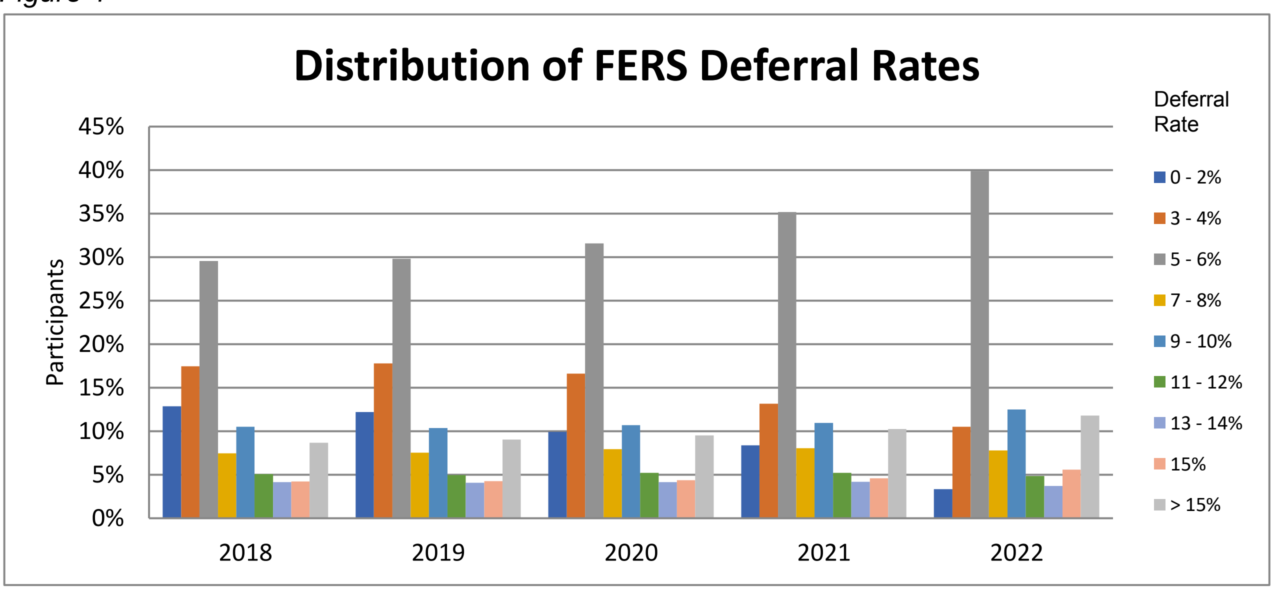


Figure 4 below illustrates the power of plan design on participant behavior. FERS participants receive dollar-for-dollar matching contributions on the first 3% of pay and 50 cents on the dollar on the next 2%. The full match is achieved with a 5% contribution. Consequently, deferral rates aggregate in the 5-6% range, with 39.9% of TSP contributors being in this range in 2022. The impact of automatic enrollment can clearly be seen as the percent of participants contributing less than 5% shows a steady decline while the percent at the default contribution rate of 5% grew. Still of significance, 13.8% of participants are not receiving the full matching contribution as they are contributing less than 5%. This is a decrease of 7.7 percentage points from 2021.

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 7.3% in 2021." Vanguard, How America Saves 2022.

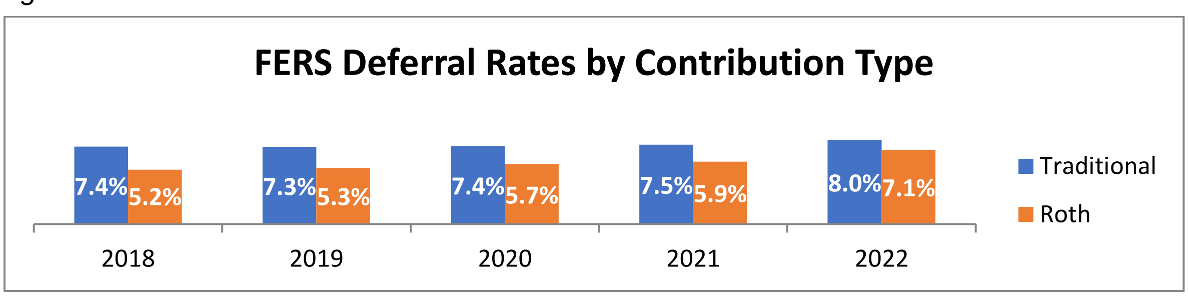
The lowest-paid participants are deferring the least – 3.6 percentage points less than the highest paid. This interval is again shrinking after expanding in 2020, but not quite as low as 2019 where the gap was 3.3 percentage points. However, with an average deferral rate of 6.8%, many of the lowest paid are still receiving the full match. Deferral rates for all salaries increased in 2022 over 2021. The youngest participants have the lowest average deferral rates, with deferrals steadily increasing with each age bracket, except for over 70 years or older. Notably, deferral rates for participants over the age of 50 decreased from 2021, which is a minor change in trend from previous years. See Table 2.

Table 2

Annual FERS Deferral Rates by Demographic Cohorts					
	2018	**2019**	**2020**	**2021**	**2022**
Age					
<= 29	5.4%	5.5%	5.8%	6.2%	6.6%
30 – 39	6.6%	6.6%	6.8%	7.1%	7.3%
40 – 49	7.3%	7.3%	7.6%	7.8%	7.9%
50 – 59	9.1%	9.1%	9.3%	9.5%	9.4%
60 – 69	10.0%	10.0%	10.2%	10.3%	10.1%
70+	10.5%	10.4%	10.5%	10.6%	10.0%
Salary Quintile					
Q1 Lowest Paid	5.9%	6.6%	6.1%	6.5%	6.8%
Q2 Lower Paid	6.9%	6.8%	7.0%	7.1%	7.8%
Q3 Mid-Range	8.1%	8.1%	8.3%	8.7%	8.9%
Q4 Higher Paid	9.0%	9.1%	9.3%	9.5%	9.9%
Q5 Highest Paid	9.8%	9.9%	10.0%	10.2%	10.4%

Roth TSP was introduced in May 2012, allowing participants 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 7.1%, versus the average traditional deferral rate of 8.0%. In previous years these statistics excluded catch up contributions but for the 2022, catch-up contributions are included, so in Figure 5 you can see an increase year over year. Prior to 2022 Traditional rates had maintained steady between 7.3-7.5% and are now 0.5% higher in 2022. Roth deferral rates increased by over 1 percentage points, a difference from the 0.1-0.2% increase trend from previous years.

Figure 5



Roth deferral rates are highest among our oldest and highest paid participants. However, all demographic cohorts experienced an increase in Roth deferrals in 2022 over 2021. (See Table 3.)

Table 3

FERS Traditional and Roth Deferral Rates by Demographic Cohorts

	2020		2021		2022	
	Traditional	Roth	Traditional	Roth	Traditional	Roth
Age						
<= 29	4.7%	5.7%	5.1%	5.9%	5.7%	6.9%
30 – 39	6.0%	5.6%	6.1%	5.9%	6.5%	6.7%
40 – 49	6.9%	5.2%	7.1%	5.5%	7.4%	6.4%
50 – 59	8.6%	5.9%	8.7%	6.1%	9.0%	7.4%
60 – 69	9.5%	6.9%	9.5%	7.1%	9.8%	8.7%
70+	10.0%	8.2%	10.0%	8.3%	10.4%	10.6%
Salary Quintile						
Q1 Lowest Paid	5.5%	5.2%	5.8%	5.6%	5.9%	6.4%
Q2 Lower Paid	6.4%	5.3%	6.3%	5.6%	6.9%	6.6%
Q3 Mid-Range	7.6%	5.9%	7.8%	6.2%	8.0%	7.1%
Q4 Higher Paid	8.5%	6.1%	8.6%	6.4%	8.9%	7.4%
Q5 Highest Paid	9.4%	6.0%	9.5%	6.1%	9.7%	7.5%

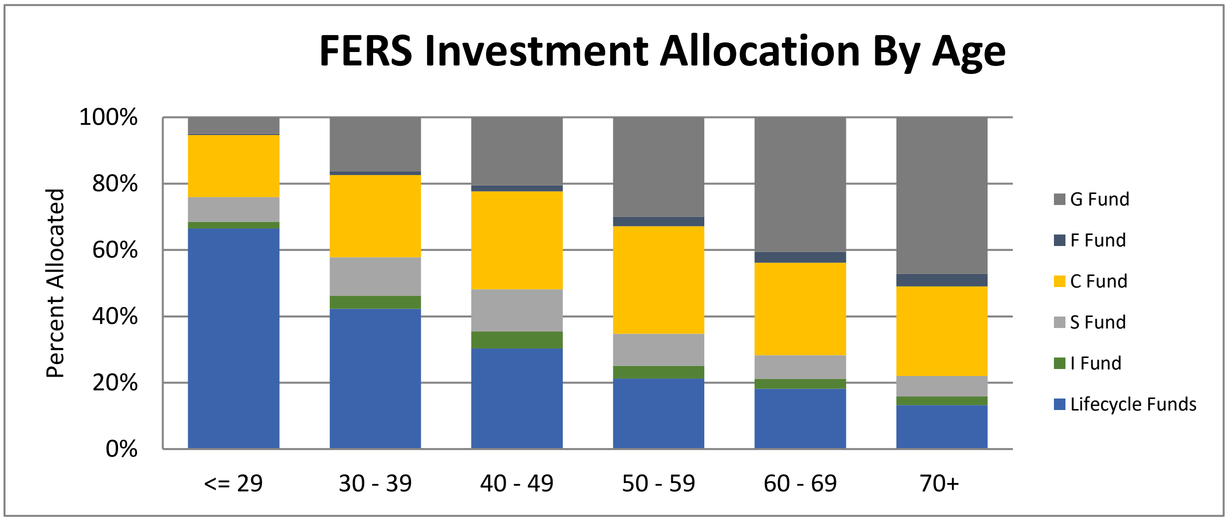
Investment Allocation

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 youngest participants who have the longest time horizon to reap the benefits of compounding returns have **5.2%** of their assets invested in the G Fund. This is a continual and significant decline from previous years.*

In Figure 6, we note that allocations to the G Fund increase with age; the youngest participants only hold 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 35.5% allocated to the G fund; this contrasts with the highest paid, who allocated only 24.8% to the G Fund in 2022. All cohorts, except for participants 29 and younger, have increased their investment in the G Fund compared to 2021 investment allocations, a change in trend from 2019-2021.

When examining L Fund allocations, the youngest age cohort had the highest level of utilization at 66.5%, which continues to increase each year. The oldest cohort has the lowest level of L Fund utilization at 13.2%; this has decreased slightly from 2021. The increase in L Fund utilization for younger participants 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. Participants over 60 allocated more to the G fund over any other fund including the L funds.

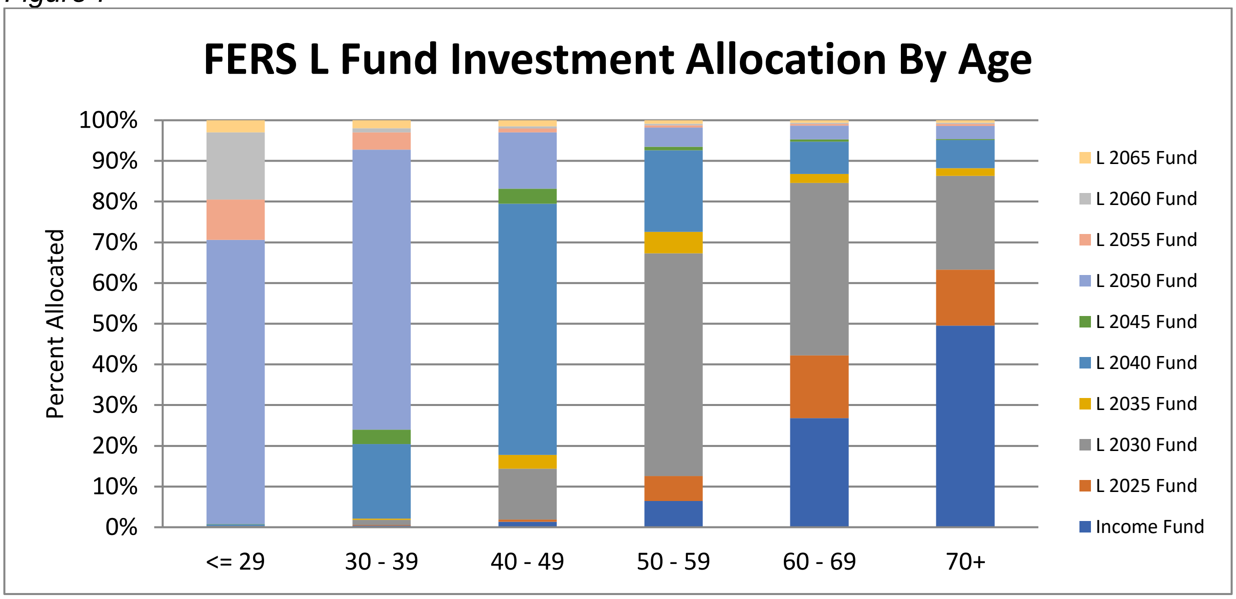
Table 4

2022 Investment Allocations by Demographic Cohorts

	G Fund	F Fund	C Fund	S Fund	I Fund	L Funds
Age						
<= 29	5.0%	0.4%	18.7%	7.4%	2.0%	66.5%
30 – 39	16.4%	1.0%	24.8%	11.6%	3.9%	42.3%
40 – 49	20.5%	1.8%	29.5%	12.8%	5.1%	30.3%
50 – 59	30.1%	2.8%	32.4%	9.6%	3.8%	21.3%
60 – 69	40.5%	3.3%	27.8%	7.2%	3.0%	18.2%
70+	47.2%	3.8%	27.0%	6.1%	2.6%	13.2%
Salary Quintile						
Q1 Lowest Paid	35.7%	1.6%	18.2%	6.4%	2.4%	35.6%
Q2 Lower Paid	40.4%	2.0%	23.7%	7.8%	2.8%	23.4%
Q3 Mid-Range	36.9%	2.3%	27.3%	8.8%	3.2%	21.6%
Q4 Higher Paid	29.4%	2.2%	28.1%	10.8%	3.9%	25.6%
Q5 Highest Paid	24.8%	2.9%	33.2%	10.4%	4.4%	24.4%

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. 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 with utilization of the new L Funds (L 2055, L 2060, L 2065) increasing over 2021 levels. Participants in the 40-49 age group were in the L 2040 Fund, as we would expect for their 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 have more assets in the L 2030 fund over the L income fund, while participants aged 70 and over are mostly in the L Income fund.

Figure 7

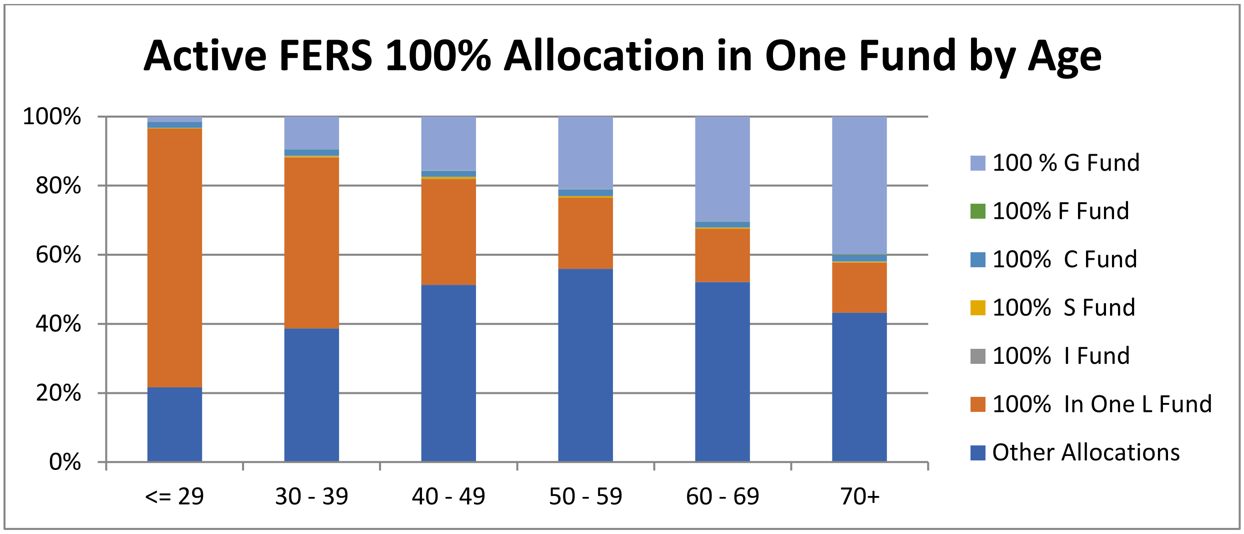


The L Funds' strategy is to invest in an appropriate mix of the G, F, C, S, and I Funds for a particular time horizon. The investment mix of each L Fund becomes more conservative as its target date approaches. Thus, the participant only needs to invest in one L Fund to achieve diversification among the core funds. In 2022 the share of participants with assets in the L Funds crossed 50%, meaning over half of participants now invest at least some of their TSP assets in the L Funds. By the end of 2022, the share of participants with all their assets in the L Funds was at 32.34%, meaning nearly one third of all participants have money solely in the L Funds.

As shown in Figure 8, the use of one L Fund is most common with the two youngest age cohorts – 75% for participants 29 and under and 49.5% for participants 30 to 39. The use of a single L Fund has been increasing each year among the younger cohorts. Most participants do not invest solely in one core fund. Among those who do so, the most popular choice is the G Fund. Investing solely in the G Fund is problematic for any age, as the G Fund is not guaranteed to 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

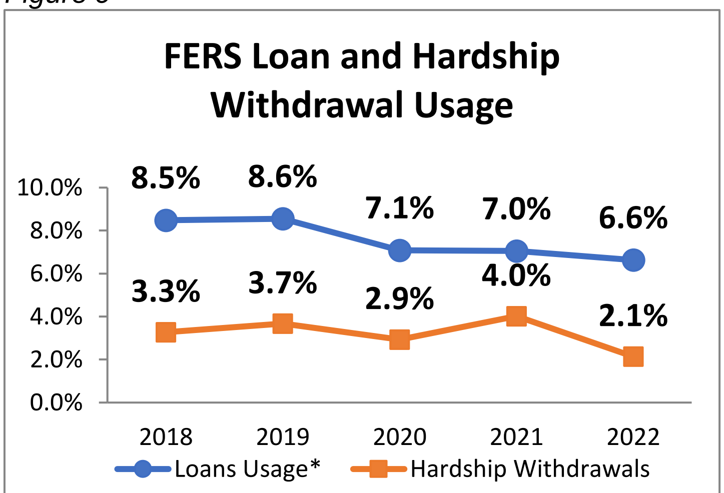


Loan and Hardship Withdrawal Usage

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. On June 1, 2022, a change in policy was implemented and participants were allowed to take out a second general purpose loan. 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



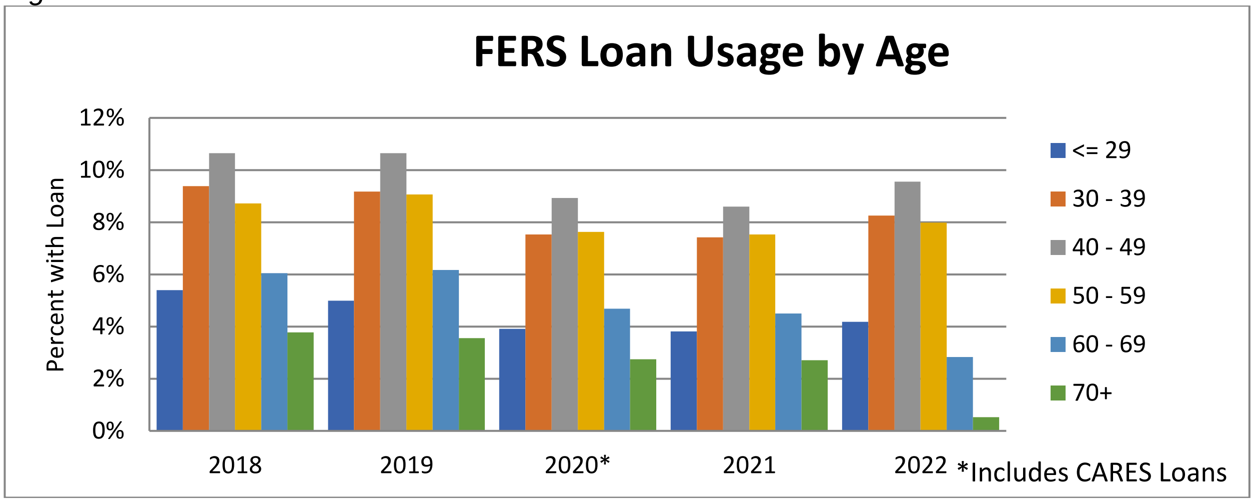
*Includes CARES

Loan usage overall decreased slightly to 6.6%, however, with the change in policy to allow for a second general purpose loans, overall loan total is up year over year.

Hardship withdrawals have decreased by 1.9 percentage points compared to 2021. With only 2.1% of participants taking hardship withdrawals, it is the lowest rate we've seen in the past five years.

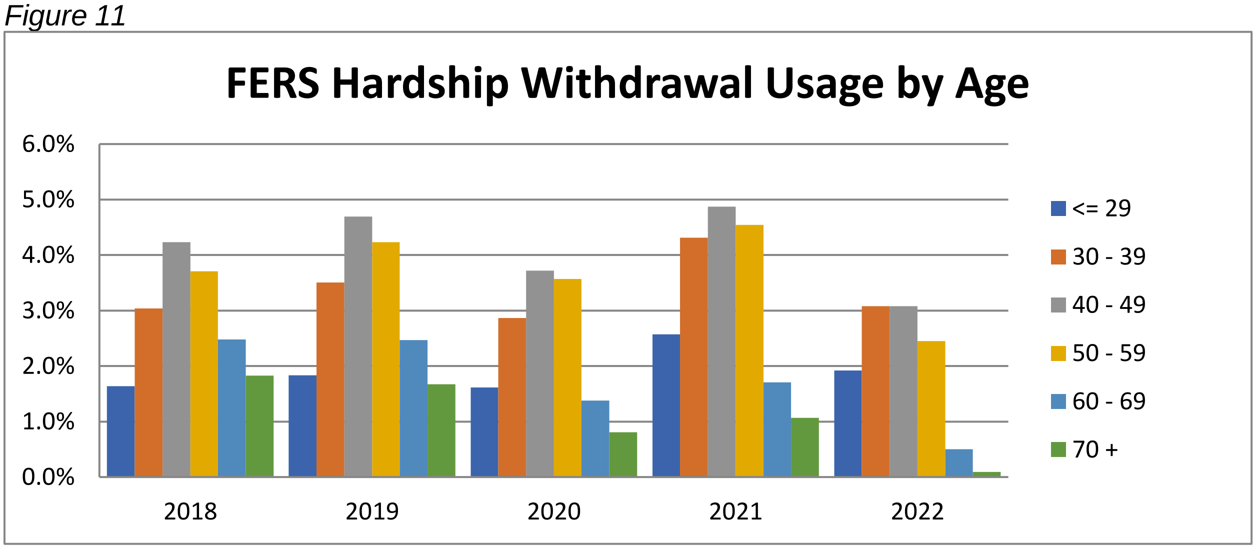
As seen in Figure 10, loan usage increased among all age groups except for participants older than 60. Usage remains the highest among the 40-49 age cohort, with 9.6% of the participants in this cohort having an active loan at the end of 2022. Usage among participants aged 30-39 was higher than those aged 50-59, 8.3% and 8% respectively; this was a flip from 2021 but similar to 2018 and 2019.

Figure 10



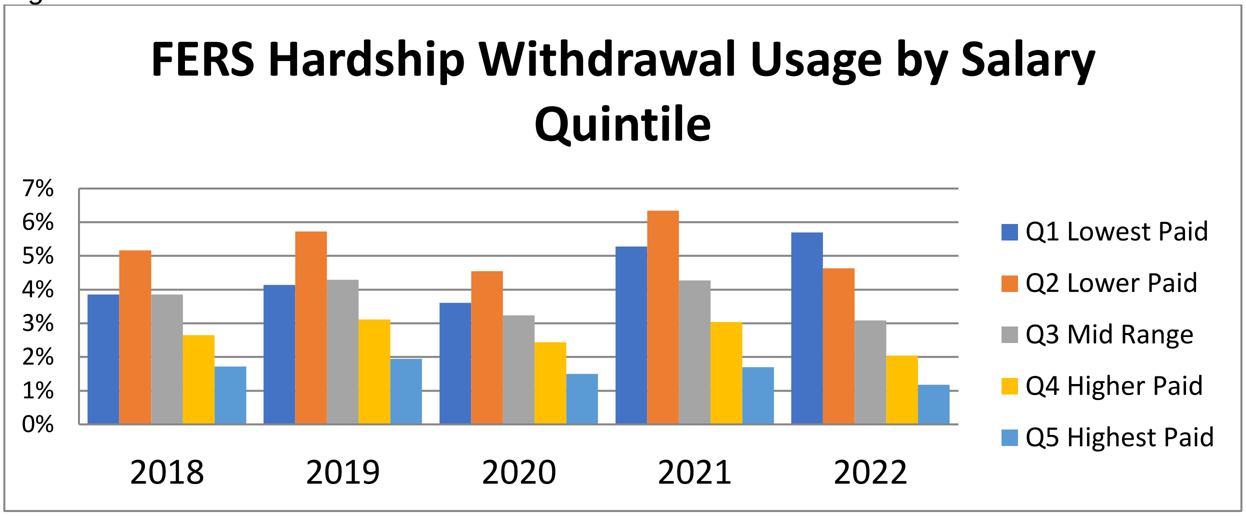
All age cohorts saw a decrease in hardship withdrawals year over year. In previous years hardship withdrawal usage was consistently highest among the 40-49 and 50-59 age cohorts but in 2022 the 30-39 and 40-49 cohorts are the most likely to have a hardship withdrawal with a usage rate of 3.1%. (See Figure 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) In previous years there was an exception in this pattern for the lowest paid, but usage increased by 0.4% while the second lowest salary quintile decreased usage by 1.7%. We can note that hardship withdrawal usage (5.7%) for the lowest paid participants is lower than their loan usage (11.4%).

Figure 12



Summary

An analysis of TSP participant data from 2018 to 2022 reveals that the TSP participant trends changed slightly. In 2022, more participants allocated funds to the G Fund, however, over 50% of participants are taking advantage of the Lifecycle Funds. Overall loan usage decreased which was driven by the older participants, as the younger cohorts had an increase in loan usage. Hardship withdrawals decreased across every cohort except for the lowest paid quintile. Overall participation rates continued to be high around 95% and deferral rates increased year over year.