Top 10 Lessons You Can Get Started on Right Now

How to Become a TSP Millionaire

by Rick Keast

How to Become a TSP Millionaire

Top 10 Lessons You Can Get Started on Right Now

by Rick Keast

FEDERAL EMPLOYEE
BENEFIT COORDINATORS

Table of Contents

Have Questions?

Contact Us:

Elizabeth Inman

Senior Federal Benefit Coordinator

Phone: (833) 693-3388

Email: elizabeth@febcnow.com

www.federalbenefitcoordinators.com

Federal Employee Employment Coordinators

500 S Broadway St. Skiatook, OK 74070

Introduction

Account Balance	Number of Participants	Average Years of Contributions
Less than $50,000	3,663,973	5.77
$50,000 to $249,999	1,529,078	15.08
$250,000 to $499,999	530,357	20.36
$500,000 to $749,999	212,110	23.12
$750,000 to $999,999	99,708	25.23
$1,000,000 or more	98,879	28.28
Total	**6,134,105**	**10.68**

Source: Thrift Savings Plan

The number of federal and postal workers to become Thrift Savings Plan (TSP) millionaires has skyrocketed in recent years. Most did it the old-fashioned way, by contributing the maximum allowed in their plan, maximizing the government match, and investing mostly in the stock indexed C, S and I Funds, all while the stock market has been on a steady climb since 2009. As you can see in the chart to the right, the number of TSP millionaires jumped to 98,879 in June 2021. Becoming a TSP millionaire doesn't happen overnight and many of the current millionaires have been investing for at least three decades[1].

The success of so many TSP investors should tell the American public that these are smart people to be emulated, however, many federal workers saving for retirement in the TSP do not take full advantage of maximizing their savings for retirement. This guide to becoming a millionaire includes the important things you must do and the pitfalls you must avoid. By following this guide, you will be on the right path to not only having a better financial outcome in retirement, but possibly becoming a TSP millionaire.

So Many TSP Millionaires

As of December 31, 2020, the TSP had approximately 6.2 million participants (of which approximately 3.8 million were actively participating through payroll deductions), and more than $735.2 billion in assets under management. It is the largest defined contribution plan in the world and has more participants than the entire population of 28 individual states. What is even more amazing is that there are 98,879 federal workers and retirees with $1 million or more in their TSP account as of June 30, 2021[2].

As you can see, participation in the TSP can significantly increase your chances of financial security in retirement. By participating in the TSP, you can save part of your income for retirement through automated payroll deductions. You can also receive matching contributions from your agency, utilize tax strategies for retirement by considering using the Roth option, and potentially grow your money for the future tax-free.

If you are a Federal Employee Retirement System (FERS) or a Blended Retirement System (BRS) employee, your agency or service will contribute an amount equal to 1% of your basic pay each pay period to your TSP account. These are called Agency/Service Automatic (1%) Contributions and you don't need to make employee contributions to receive them. Additionally, the first 3% of pay that you contribute will be matched dollar-for-dollar and the next 2% will be matched at 50 cents on the dollar. Contributions above 5% of your pay will not be matched.

This guide will show you how to join this group of millionaires!

Lesson #1: Determine a path to contribute at least 5%

According to the latest published Annual Report of the Thrift Savings Plan[2], 30% of TSP participants are contributing less than the 5% required to receive the full matching contribution from their agency. If you are not contributing at least 5% of your compensation into your TSP, you are missing out on free money. You may already be contributing at 5% and not know it, because on October 1, 2020, the automatic enrollment percentage for TSP increased from 3% to 5% of basic pay. So, if you enrolled with this default option, on or after that date, congratulations, you are contributing pre-tax income at a 5% rate.

If you can't start at the 5% contribution rate, the most important thing is that you begin contributing to the TSP right now. A great way to ease into the 5% contribution rate is to start contributing at 1% and then increase your contribution rate by 1% every year or when you receive a cost-of-living-adjustment (COLA) or merit raise. This will allow you to increase your contributions without feeling a loss of income.

What is most interesting, is that TSP participants contributing more than 5% are the most satisfied with the TSP. In 2021, The Federal Retirement Thrift Investment Board (FRTIB), the agency that oversees and administers the plan, partnered with Gallup to survey a sample of some 36,000 TSP participants[3]. Of the 50% of respondents who said they contribute more than 5% toward their TSP, 94% are satisfied with the plan. Compare that with the 29% of respondents who said they contribute at the 5% level and the 10% who contribute less than 5% toward the TSP. Among those groups, satisfaction with the plan is 90% and 86%, respectively.

But, if you enrolled in the TSP before October 1, 2020, you may have elected to contribute an amount lower than 5%. If you are contributing at a lower rate than 5%, you should strongly consider increasing your contribution rate to at least 5% (or in the 1% increments as described above). That way you will receive the maximum matching contribution from your agency.

So, let's look at an example. The charts on the right show a 30-year-old, that makes $50,000, and will retire at age 65. Example A depicts a 2% annual contribution and their agency matching dollar-for-dollar. Under Example A, the participant will have a total of $90,000 in contributions at age 65, not bad.

Under Example B, this participant contributes 5% annually to TSP and their agency matches dollar-for-dollar on the first 3% of compensation and $.50 on the next 2% of compensation. Under this example, they will have a total of $180,000 in contributions at age 65, much better. As you can see, if you are contributing 2% annually into your TSP account, you are missing out on $90,000 of free money from the federal government!

Example A

Age	2% Annual Contribution	1% Automatic Employing Services Contribution	2% Agency Match	Total Contribution
30	$1,000	$500	$1,000	$2,500
31	$1,000	$500	$1,000	$2,500
32	$1,000	$500	$1,000	$2,500
33	$1,000	$500	$1,000	$2,500
34	$1,000	$500	$1,000	$2,500
35	$1,000	$500	$1,000	$2,500
36	$1,000	$500	$1,000	$2,500
37	$1,000	$500	$1,000	$2,500
38	$1,000	$500	$1,000	$2,500
39	$1,000	$500	$1,000	$2,500
40	$1,000	$500	$1,000	$2,500
41	$1,000	$500	$1,000	$2,500
42	$1,000	$500	$1,000	$2,500
43	$1,000	$500	$1,000	$2,500
44	$1,000	$500	$1,000	$2,500
45	$1,000	$500	$1,000	$2,500
46	$1,000	$500	$1,000	$2,500
47	$1,000	$500	$1,000	$2,500
48	$1,000	$500	$1,000	$2,500
49	$1,000	$500	$1,000	$2,500
50	$1,000	$500	$1,000	$2,500
51	$1,000	$500	$1,000	$2,500
52	$1,000	$500	$1,000	$2,500
53	$1,000	$500	$1,000	$2,500
54	$1,000	$500	$1,000	$2,500
55	$1,000	$500	$1,000	$2,500
56	$1,000	$500	$1,000	$2,500
57	$1,000	$500	$1,000	$2,500
58	$1,000	$500	$1,000	$2,500
59	$1,000	$500	$1,000	$2,500
60	$1,000	$500	$1,000	$2,500
61	$1,000	$500	$1,000	$2,500
62	$1,000	$500	$1,000	$2,500
63	$1,000	$500	$1,000	$2,500
64	$1,000	$500	$1,000	$2,500
65	$1,000	$500	$1,000	$2,500
Total	**$36,000**	**$18,000**	**$36,000**	**$90,000**

Example B

Age	5% Annual Contribution	1% Automatic Employing Services Contribution	4% Agency Match	Total Contribution
30	$2,500	$500	$2,000	$5,000
31	$2,500	$500	$2,000	$5,000
32	$2,500	$500	$2,000	$5,000
33	$2,500	$500	$2,000	$5,000
34	$2,500	$500	$2,000	$5,000
35	$2,500	$500	$2,000	$5,000
36	$2,500	$500	$2,000	$5,000
37	$2,500	$500	$2,000	$5,000
38	$2,500	$500	$2,000	$5,000
39	$2,500	$500	$2,000	$5,000
40	$2,500	$500	$2,000	$5,000
41	$2,500	$500	$2,000	$5,000
42	$2,500	$500	$2,000	$5,000
43	$2,500	$500	$2,000	$5,000
44	$2,500	$500	$2,000	$5,000
45	$2,500	$500	$2,000	$5,000
46	$2,500	$500	$2,000	$5,000
47	$2,500	$500	$2,000	$5,000
48	$2,500	$500	$2,000	$5,000
49	$2,500	$500	$2,000	$5,000
50	$2,500	$500	$2,000	$5,000
51	$2,500	$500	$2,000	$5,000
52	$2,500	$500	$2,000	$5,000
53	$2,500	$500	$2,000	$5,000
54	$2,500	$500	$2,000	$5,000
55	$2,500	$500	$2,000	$5,000
56	$2,500	$500	$2,000	$5,000
57	$2,500	$500	$2,000	$5,000
58	$2,500	$500	$2,000	$5,000
59	$2,500	$500	$2,000	$5,000
60	$2,500	$500	$2,000	$5,000
61	$2,500	$500	$2,000	$5,000
62	$2,500	$500	$2,000	$5,000
63	$2,500	$500	$2,000	$5,000
64	$2,500	$500	$2,000	$5,000
65	$2,500	$500	$2,000	$5,000
Total	**$90,000**	**$18,000**	**$72,000**	**$180,000**

Source: Redhawk Wealth Advisors, Inc.

You need the full agency matching dollars to become a TSP millionaire.

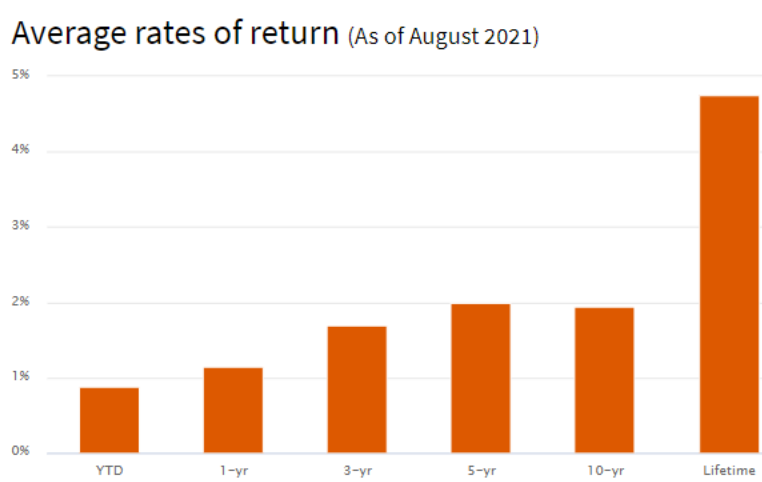
Lesson #2: Avoid investing 100% of your account in the G Fund

Many federal employees like the Government Securities Investment Fund (G Fund) because it is the safest investment available in the plan. The fund is invested in short-term U.S. Treasury securities that are specifically issued to the TSP, so principal and interest payments are guaranteed by the federal government.

The G Fund interest rate calculation is based on the weighted average yield of all outstanding Treasury notes and bonds with four or more years to maturity. As a result, participants who invest in the G Fund are rewarded with a long-term rate on what is essentially a short-term security. Generally, long-term interest rates are higher than short-term rates. The G Fund's objective is to ensure preservation of capital and generate returns above those of short-term U.S. Treasury securities. Unfortunately, the G Fund has historically provided the lowest rate of return of any of the TSP funds.

Most people considering an investment in the G Fund prefer to have their TSP account completely protected from loss. However, in today's low interest rate environment, they are placing a higher priority on the stability and preservation of their money than on the opportunity to potentially achieve greater long-term growth in their account. While the G Fund may post gains over time, it may be losing value if it does not at least keep pace with the rate of inflation. For example, if the G Fund returns 2% before inflation in an environment of 3% inflation, it will produce a negative return (−1%) when adjusted for inflation.

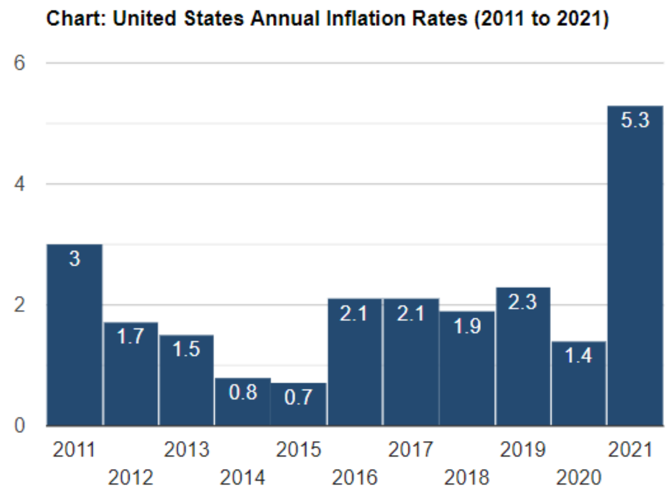
As of August 2021, the G Fund year-to-date return was 0.88%. The chart below shows the recent history of average rates of returns for the G Fund. As you can see, the returns have been decreasing as interest rates have declined.[4]



	YTD	1 yr	3 yr	5 yr	10 yr	Lifetime
G Fund	0.88%	1.15%	1.70%	1.99%	1.94%	4.75%

Source: Thrift Savings Plan

Unfortunately, if you put all your money into the G Fund, your account will most likely not even keep up with inflation. Inflation risk means that your G Fund investment will not grow enough to offset the reduction in purchasing power that results from inflation. The chart to the right shows the inflation rate since 2011[5]. If the current G Fund year-to-date return is 0.88% and the inflation rate for 2021 is 5.3% (both as of August 31, 2021), this means you are losing 4.42% in 2021 because of inflation! Obviously, this is not the best way to grow your savings for retirement, or to become a TSP millionaire.



Source: CoinNews Media Group

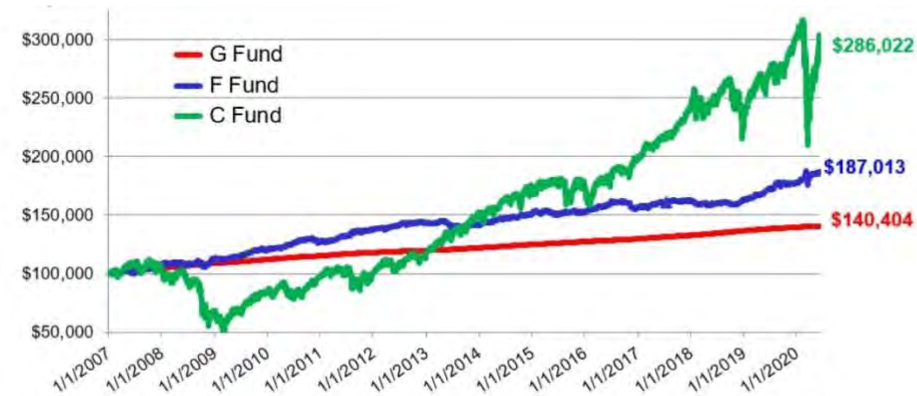
To stay ahead of the corrosive effects of inflation, you will need to diversify your TSP account among the stock indexed funds that are available. You should only be in the G Fund if you are near or in retirement or if there is a significant market correction and you want to preserve your account balance.

The dark side of the G Fund

If someone told you that they borrowed money from an account you were using for future retirement income without your consent or your knowledge, you would probably be very upset. If your money was in a large financial institution, and that company advised you it was temporarily short of funds and needed to pay its expenses so it was borrowing from your investment accounts, lawsuits would proliferate, and the company would probably end up going bankrupt when the public lost faith in the safety of their investments.

Alarming as it sounds, this happens periodically to money that is invested in the G Fund. Since the G Fund is managed and backed by the federal government, there are times that the government may use the money in the G Fund as a temporary stop gap to help with the federal budget or shortfalls in other areas of the government. Over the last 23 years, the government has briefly suspended investment in the G Fund 12 times. Most recently, at the end of July 2021, the federal government hit its borrowing limit and Treasury Secretary Janet Yellen sent a letter to House Speaker Nancy Pelosi informing her that she would suspend investments in the Civil Service Retirement and Disability Fund, the Postal Service Retiree Health Benefits Fund, and the Thrift Savings Plan's G Fund, which is made up of government securities, to avoid breaching the debt ceiling[6]. Obviously, you don't need to worry about this because your money is safe in the G Fund since it is backed by the federal government.

The opportunity costs of investing in the G Fund are significant to growing your TSP account balance to an amount that can really help you in retirement. Investing in the G Fund is not going to generate the necessary amount you need in retirement. Let's take another look. The chart below compares the G Fund, F Fund, and C Fund performance since 2007[7].



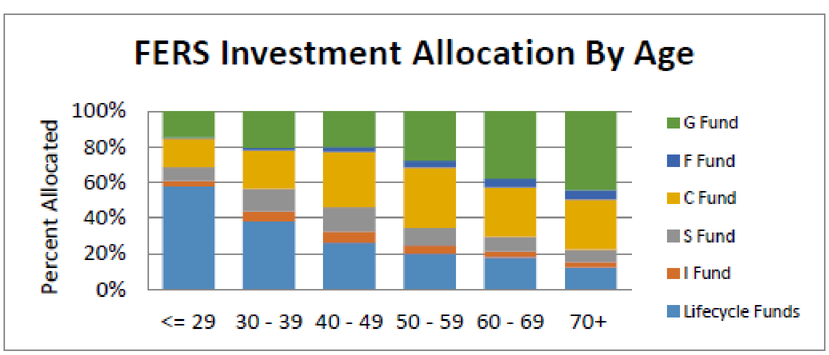
Note: Data assumes no further contributions and reinvestment of all income and does not account for taxes or transaction costs. .Past performance is no guarantee of future performance. The F and C Funds track indexes: F – Bloomberg Barclays U.S. Aggregate Bond Index; C – Standard & Poor's 500 Index. The G Fund does not track an index. This is for illustrative purposes only and not indicative of any investment. An investment cannot be made directly in an index. Past performance is no guarantee of future performance. All investments involve the risk of loss.

Source: Federal News Network

Now let's say that you were going to retire in June of 2020 and back in 2007 you had $100,000 in your TSP account. Would you rather have $140,404 to retire with or $286,022?

Despite all the negative aspects of investing in the G Fund, the youngest participants who have the longest time horizon to realize the benefits of compounding returns have 14.7% of their assets invested in the G Fund[2]. Additionally, the lowest-paid participants have approximately 38.9% allocated to the G Fund as compared to the highest paid who allocated 21.9% to the G Fund.

The chart below shows that the allocations to the G Fund, for Federal Employee Retirement System (FERS) participants, increases as the age of the TSP's population increases[2]. This behavior is consistent with the expectation that participants tend to shift their investment allocation towards the safer G Fund as they approach retirement age.



Source: Thrift Savings Plan

Consider not investing 100% of your account in the G Fund to become a TSP millionaire.

Lesson #3: Skip the easy button of using a Lifecycle Fund

The Lifecycle funds available in the TSP (L Funds), take a retirement "target date" approach to investing. They are based on age and year of retirement with the idea that younger federal employees can handle more risk than federal employees who are closer to retirement.

So, let's take a closer look at the approach of the Lifecycle funds. The L Funds mix several of the TSP stock indexed funds and bond funds to help participants take on more risks when they are young, and gradually get more conservative in the investment strategy over time. Over the years, the asset allocation follows what is known as the "glide path" towards a less risky position dominated by the G and F Funds.

As a federal employee, you can take on more risk when you are younger because you have time on your side and can weather the typical ups and downs of the stock market over a long-term horizon. The target allocations of all the retirement year L Funds are automatically adjusted, gradually shifting from higher risk and reward to lower risk and reward as they get closer to their target retirement dates.

The L Funds are very popular because they allow the participant to set-it and forget-it, putting their TSP account on auto pilot. However, what is often a great investment solution for many federal employees early in their career becomes less appropriate for many as they approach retirement. The L Funds are not meant to be personalized investment advice as every individual will have different risk tolerances, unique needs, and distinct goals that should shape their investment choices, especially when they retire[8].

If you are a young federal employee and have a lot of time before retirement, there are few times that it does not make sense for you to invest aggressively. But as people approach retirement, the best investment strategy starts to change depending on the situation. Even two people retiring at the same time will probably need to have different investment strategies, depending on personal circumstances.

Each L Fund starts its equity allocation at 90% and will end at a 30% equity allocation in the prescribed target year[9]. Each L Fund will get more conservative over time and eventually merge into the L Income Fund, which is the most conservative L Fund once the target retirement year for that Lifecycle has passed.

For example, the chart below[10] shows how the allocation of the L 2030 Fund shifts over time. As you can see, when someone is about 25 years from retirement, 75% of the assets are in the stock indexed funds. The fund gradually shifts the asset allocation from stocks to bonds, but then makes a rapid shift to bonds about five years from the target date.

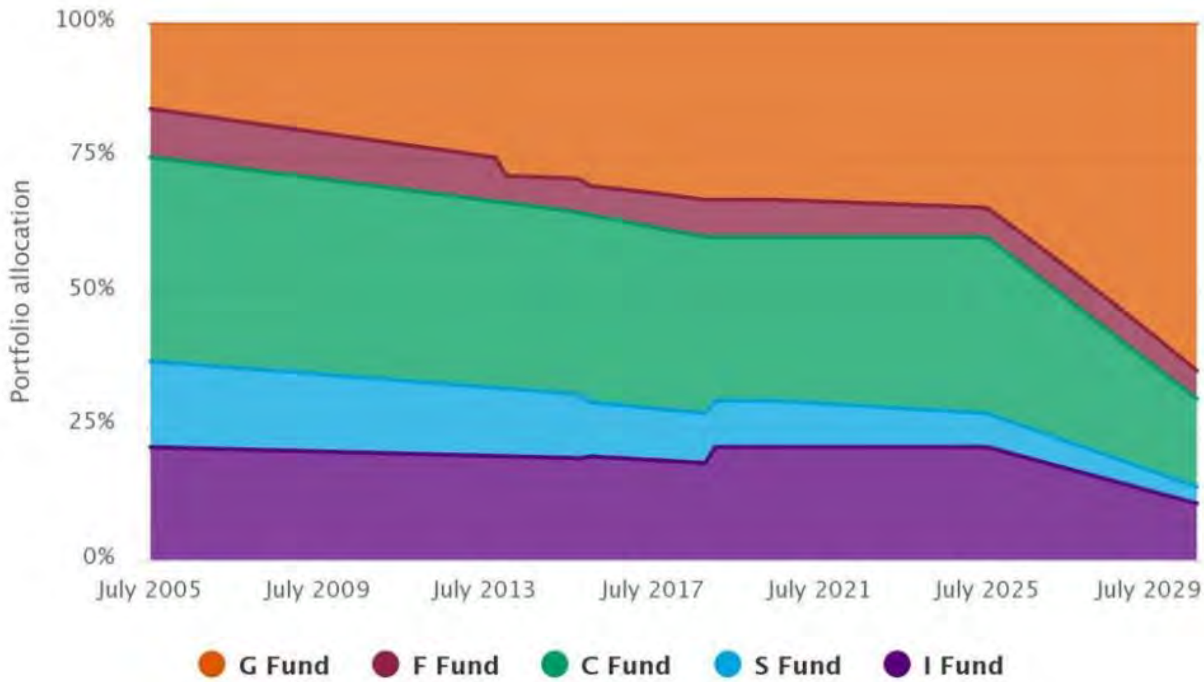


IMAGE SOURCE: TSP.GOV. G FUND = GOVERNMENT SECURITIES INDEX FUND. F FUND = U.S. BOND INDEX FUND. C FUND = S&P 500 INDEX FUND. S FUND = U.S. TOTAL STOCK MARKET INDEX FUND. I FUND = INTERNATIONAL STOCK INDEX FUND.

The L Funds are very popular among federal employees because they are convenient, and they provide automatic management of their TSP account. However, they have three serious drawbacks you should consider[11]:

1. **L Funds reallocate money without regard to underlying economic fundamentals.**
   The L Fund holdings are adjusted once per quarter according to a preset formula. If stocks pose a potentially good buying opportunity, the fund will not adjust to purchase more stocks. Conversely, if stocks do not look as attractive as other asset classes, there will be no reduction in stock holdings. These funds are not actively managed to take advantage of market trends. They will experience the same volatility as what is occurring in the current market conditions.

   Looking at the glide path of the L 2030 Fund in the chart above, in 2025, with five years left until maturity, the L 2030 Fund still has roughly 70% invested in equities. Because the L Funds are on a preset formula, you are subject to sequence of returns risk, which is the potential for negative returns in the last few years before retirement. For example, if the markets experience a substantial market downturn like the 2008 global financial crisis when the S&P 500 lost 48% in six-months, or the 2020 COVID-19 induced market crash when the S&P 500 lost nearly 31% in just a few weeks, these types of downturns can destroy the value of your retirement savings. What is even worse is that if a crash occurs immediately before retirement, you may no longer be able to retire if you want to enjoy the same standard of living.

As you get closer to retirement, the L Funds can be a very poor choice for federal employees given the sequence of returns risk, described above. These funds are designed to be hands-off asset allocation funds and you will be subject to the whims of the market, even as you near retirement. If you want to become a TSP millionaire, you need to be more proactive about protecting your assets from market volatility when you are close to retirement or are in retirement.

Let's look at the sequence of returns risk in more detail because it is a critical concept that comes into play as you near retirement.

Sequence of returns risk analyzes the order in which your investment returns occur. It affects you when you are periodically adding or withdrawing money from your investments. In retirement, it can mean that you earn a much lower internal rate of return than what you expected. The best way to understand sequence of returns risk is with an example (see the chart to the right)[12].

In this example both Mr. Green and Mr. Brown experience different sequence of returns during retirement. Even though their returns are different each year, they have an average return of 6% and consequently their ending balance at age 90 is the same.

	"Up" Market - Mr. Green		"Down" Market - Mr. Brown	
Age	**Annual Return**	**Year End Value**	**Annual Return**	**Year End Value**
65		$1,000,000		$1,000,000
66	5%	$1,050,000	-25%	$750,000
67	28%	$1,344,000	-14%	$645,000
68	22%	$1,639,680	-10%	$580,500
69	-5%	$1,557,696	16%	$673,380
70	20%	$1,869,235	21%	$814,790
71	19%	$2,224,390	5%	$855,529
72	23%	$2,736,000	-16%	$718,645
73	9%	$2,982,240	8%	$776,136
74	16%	$3,459,398	14%	$884,795
75	23%	$4,255,059	24%	$1,097,146
76	22%	$5,191,172	14%	$1,250,747
77	-26%	$3,841,468	5%	$1,313,284
78	-15%	$3,265,247	-15%	$1,116,291
79	5%	$3,428,510	-26%	$826,056
80	14%	$3,908,501	22%	$1,007,788
81	24%	$4,846,541	23%	$1,239,579
82	14%	$5,525,057	16%	$1,437,912
83	8%	$5,967,062	9%	$1,567,324
84	-16%	$5,012,332	23%	$1,927,808
85	5%	$5,262,949	19%	$2,294,092
86	21%	$6,368,168	20%	$2,752,910
87	16%	$7,387,075	-5%	$2,615,264
88	-10%	$6,648,367	22%	$3,190,623
89	-14%	$5,717,596	28%	$4,083,997
90	-25%	**$4,288,197**	5%	**$4,288,197**
Average Return	**6%**		**6%**	

Source: Redhawk Wealth Advisors, Inc.

If you are taking withdrawals from your portfolio, the order or the sequence of investment returns can significantly impact your portfolio's overall value. Consider the following hypothetical investment scenarios for Mr. Green and Mr. Brown. Mr. Green and Mr. Brown both started with a $1 million investment portfolio at age 65. Both averaged a 6% annual return that grows to the same value after 25 years, but they experience their annual returns in an inverse order from each other.

Once you start withdrawing income, you are affected by the change in the sequence in which the returns occurred. Now let's look at how the sequence of returns can impact a portfolio when taking distributions (see the chart below). Mr. Green and Mr. Brown still start with an initial $1 million investment portfolio. But in this example, they start taking 5% withdrawals (of the initial value) beginning immediately at age 65. Mr. Green begins taking withdrawals in an up market, giving him the optimal environment to maintain his portfolio value long-term.

Unfortunately for Mr. Brown, he starts taking income in a down market and depletes his entire portfolio before reaching age 83. It is important that you have a sound risk management process so that your portfolio changes in response to various market conditions.

	"Up" Market - Mr. Green			"Down" Market - Mr. Brown		
Age	**5% Annual Withdrawals**	**Annual Return**	**Year End Value**	**5% Annual Withdrawals**	**Annual Return**	**Year End Value**
65			$1,000,000			$1,000,000
66	$50,000	5%	$1,000,000	$50,000	-25%	$700,000
67	$50,000	28%	$1,230,000	$50,000	-14%	$552,000
68	$50,000	22%	$1,450,600	$50,000	-10%	$446,800
69	$50,000	-5%	$1,328,070	$50,000	16%	$468,288
70	$50,000	20%	$1,543,684	$50,000	21%	$516,628
71	$50,000	19%	$1,786,984	$50,000	5%	$492,460
72	$50,000	23%	$2,147,990	$50,000	-16%	$363,666
73	$50,000	9%	$2,291,309	$50,000	8%	$342,760
74	$50,000	16%	$2,607,919	$50,000	14%	$340,746
75	$50,000	23%	$3,157,740	$50,000	24%	$372,525
76	$50,000	22%	$3,802,443	$50,000	14%	$374,679
77	$50,000	-26%	$2,763,808	$50,000	5%	$343,412
78	$50,000	-15%	$2,299,237	$50,000	-15%	$241,901
79	$50,000	5%	$2,364,199	$50,000	-26%	$129,006
80	$50,000	14%	$2,645,186	$50,000	22%	$107,388
81	$50,000	24%	$3,230,031	$50,000	23%	$82,087
82	$50,000	14%	$3,632,235	$50,000	16%	$45,221
83	$50,000	8%	$3,872,814	$50,000	9%	$0
84	$50,000	-16%	$3,203,164	$50,000	23%	$0
85	$50,000	5%	$3,313,322	$50,000	19%	$0
86	$50,000	21%	$3,959,120	$50,000	20%	$0
87	$50,000	16%	$4,542,579	$50,000	-5%	$0
88	$50,000	-10%	$4,038,321	$50,000	22%	$0
89	$50,000	-14%	$3,422,956	$50,000	28%	$0
90	$50,000	-25%	**$2,517,217**	$50,000	5%	**$0**

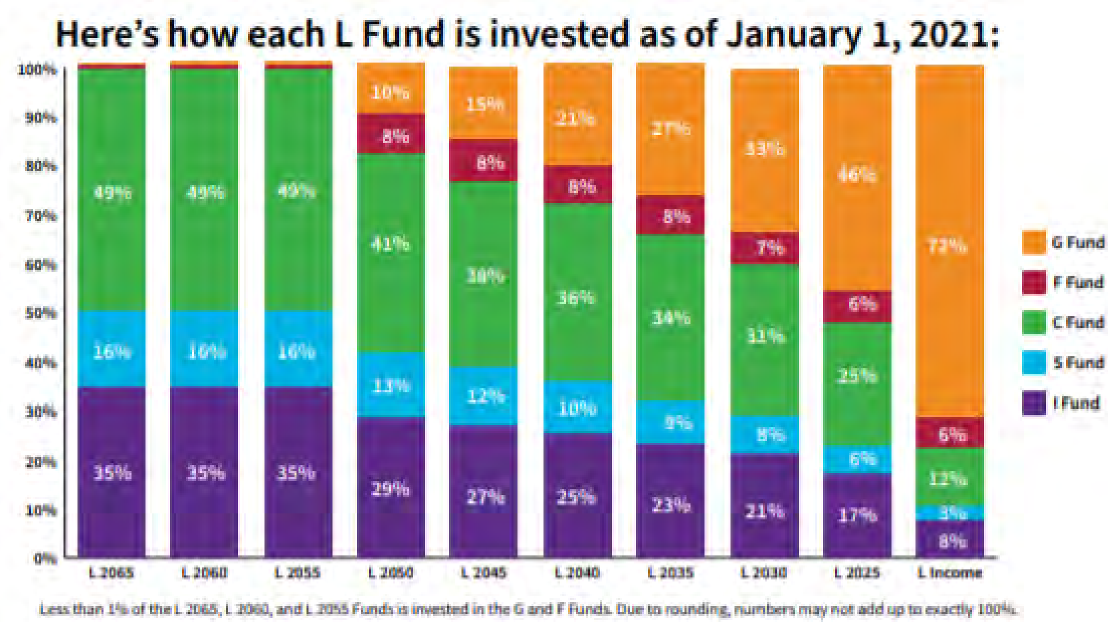
Source: Redhawk Wealth Advisors, Inc.

During your retirement years, if a high proportion of negative returns occur in the beginning years of your retirement, it will have a lasting negative effect and reduce the amount of income you can withdraw over your lifetime. As discussed, this is called the sequence of returns risk. When you are retired, you need to sell investments periodically to support your cash flow needs. If the negative returns occur first, you end up selling some holdings so you reduce the shares you own that are available to participate in the later-occurring positive returns.

2. L Funds have too much allocated to the I Fund.

When looking at the asset allocations of each of the L Funds, it is interesting to note that they have too much allocated to international markets. The I Fund is the worst performing fund among the stock indexed funds (C, S, and I Funds) in the TSP. The chart below shows the percentage amount allocated to the I Fund (in purple) across the various L Funds[13].

The I Fund has consistently underperformed when compared to the C Fund and the S Fund by a very wide margin (see the three diagrams below with the annual returns circled in red). The large allocation to the I Fund has negatively impacted the returns of the L Funds. This is a severe flaw in how the L Funds are constructed and the allocation between the I Fund, and the S Fund should really be switched which would lead to better returns.



Source: Thrift Savings Plan

C Fund

Trailing Annualized Returns (After Expenses)

	C Fund*	S&P 500 Index
1-Year	18.31%	18.40%
3-Year	14.13%	14.18%
5-Year	15.20%	15.22%
10-Year	13.90%	13.88%
Since Inception January 29, 1988	10.88%	10.90%

* After expenses

S Fund

Trailing Annualized Returns (After Expenses)

	S Fund*	Dow Jones U.S. Completion TSM Index
1-Year	31.85%	32.17%
3-Year	15.25%	15.21%
5-Year	16.06%	15.89%
10-Year	13.32%	13.03%
Since Inception May 1, 2001	10.24%	10.16%

* After expenses

I Fund

Trailing Annualized Returns (After Expenses)

	I Fund*	EAFE Index
1-Year	8.17%	7.82%
3-Year	4.68%	4.28%
5-Year	7.99%	7.45%
10-Year	5.87%	5.51%
Since Inception May 1, 2001	5.16%	5.01%

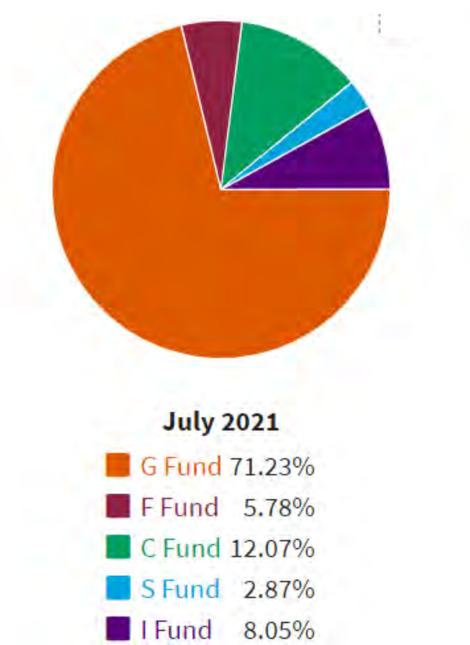
* After expenses

Source: Thrift Savings Plan. Returns as of 6/30/2021.

3. L Funds become too conservative upon their maturity date.

Why do we say this? Let's look at the L 2030 Fund which matures in 2030 and transfers into the L Income Fund (see the chart to the right[14]). As you can see, as of July 2021, the L Income Fund has 23% in stock indexed funds and 77% in the G Fund and F Fund. A conservative but more prudent retirement portfolio may hold 50-60% in the G and F Funds with the remaining 40-50% in the TSP stock funds to provide more exposure to growth and risk-controlled income over the remaining life of the TSP participant.

L- Income Fund Asset Allocation



Source: Thrift Savings Plan

As we highlighted above, the L Funds are made up of a combination of all five TSP funds, and they automatically shift to a more conservative asset allocation as you approach your planned retirement date. Many federal employees have chosen a Lifecycle fund because it sounded like an "autopilot" solution. However, when you fly on an airplane, only the middle of your flight is set to autopilot, you still need a pilot for a safe takeoff and landing. Autopilot without a pilot is dangerous, not safe.

Additionally, the Lifecycle funds assume that all federal employees who plan to retire in the same year have the same risk tolerance and financial goals. Not every 50-year-old has the same tolerance for risk. This is clearly not the case and the funds you choose for your TSP account can be the difference in achieving the retirement you have always wanted or becoming the next TSP millionaire.

Consider not investing in an L-Fund to become a TSP millionaire.

Lesson #4: Bypass selecting TSP funds based upon past performance

I am sure you have heard it before that "past performance is no guarantee of future results." Remember, you are investing for the future, not the past and funds cannot guarantee to repeat what they have done in the past. As you can see in the chart below, each year there is a different top performing fund in the TSP[15].

TSP Fund Returns by Year

2020	2019	2018	2017	2016	2015	2014	2013	2012
S Fund 31.85%	C Fund 31.45%	G Fund 2.91%	I Fund 25.42%	S Fund 16.35%	G Fund 2.04%	C Fund 13.78%	S Fund 38.35%	I Fund 18.62%
C Fund 18.31%	S Fund 27.97%	L Income 0.71%	C Fund 21.82%	C Fund 12.01%	L Income 1.85%	S Fund 7.80%	C Fund 32.45%	S Fund 18.57%
L 2050 14.79%	L 2050 23.33%	F Fund 0.15%	L 2050 18.81%	L 2050 8.65%	C Fund 1.46%	F Fund 6.73%	L 2050 26.20%	C Fund 16.07%
L 2040 13.16%	I Fund 22.47%	L 2030 -3.58%	S Fund 18.22%	L 2040 7.90%	L 2030 1.04%	L 2050 6.37%	L 2040 23.23%	L 2050 15.85%
L 2030 11.26%	L 2040 20.69%	C Fund -4.41%	L 2040 16.77%	L 2030 7.07%	F Fund 0.91%	L 2040 6.22%	I Fund 22.13%	L 2040 14.27%
I Fund 8.17%	L 2030 17.60%	L 2040 -4.89%	L 2030 14.54%	L Income 3.58%	L 2040 0.73%	L 2030 5.74%	L 2030 20.16%	L 2030 12.61%
F Fund 7.50%	F Fund 8.68%	L 2050 -6.02%	L Income 6.19%	F Fund 2.91%	L 2050 0.45%	L Income 3.77%	L Income 6.97%	L Income 4.77%
L Income 5.15%	L Income 7.60%	S Fund -9.26%	F Fund 3.82%	I Fund 2.10%	I Fund -0.51%	G Fund 2.31%	G Fund 1.89%	F Fund 4.29%
G Fund 0.97%	G Fund 2.24%	I Fund -13.43%	G Fund 2.33%	G Fund 1.82%	S Fund 2.92%	I Fund -5.27%	F Fund -1.68%	G Fund 1.47%

Source: Fund returns from the Thrift Savings Plan. Chart constructed by Redhawk Wealth Advisors, Inc.

Additionally, a study conducted by Russell Investments found that the average stock fund investor's inclination to chase past performance cost them 2% annually in the 33-year period from 1984-2016[16].

Instead of chasing past performance when selecting a TSP fund, a much better approach is to focus on your financial goals, time horizon for retirement, and tolerance for risk, which is commonly called your *investment objective*. Let's look at these in more detail.

Financial Goals

Financial goals are targets, usually driven by specific future financial needs and your TSP account may play a big part in achieving these goals. Some financial goals you might set as an individual include saving for a comfortable retirement, saving to send your children to college, managing your finances to purchase a home, or becoming the next TSP millionaire. A goal is the first step that sets you on a path and should be inspirational, based on your own values and interests. Ask what matters most to you? What are you willing to sacrifice to make it happen? What can help you stay the course?

Categorizing your financial objectives into short, medium, and long-term provides focus for your plan. Since your TSP account is used to satisfy long-term goals and specifically retirement, we won't discuss short-term and medium-term goals in this guide.

Long-term goals are more than fifteen years away. Some of life's biggest goals, including retirement, fall into this category. For your long-term goals, you may want to consider more aggressive investments which will potentially earn you more money. As we have mentioned earlier in the guide, as your goal nears, it makes sense to increase the percentage of more conservative investments, such as the G Fund, F Fund, or L Income fund, to reduce risk and ensure your financial stability.

Time Horizon for Retirement

The amount of time you have until retirement is considered your time horizon and it is instrumental in determining how you should manage risk. The more time you have, the easier it will be for your TSP account to absorb risk. To balance both the income and growth levels of your TSP account you will need to allocate your money according to your level of acceptable risk as well as the amount of time you have available to achieve your goals.

Remember, the longer your time horizon, the more volatility you can tolerate in your portfolio. For example, if you are pursuing a longer-term goal such as retirement, you will be most concerned with long-term growth and managing inflation risk. Your portfolio should be more heavily weighted in the stock indexed funds (C, S, and I Funds) as these have historically provided the highest long-term returns and outpaced inflation by the widest margin. You may also want to put some money into bonds to help mitigate the higher risks associated with stocks. Keep in mind that the stock indexed funds offer long-term growth potential but will fluctuate widely and it is always prudent to buffer the volatility with an allocation to the bond investments.

On the other hand, if you are already in retirement, you may need to rely heavily on the income from your TSP account. Therefore, you may seek to manage income and manage risk of short-term losses. Your TSP account will likely be weighted in the bond investments (G, F, and L Income Funds contain bond asset classes), with some stock indexed funds in the mix to maintain growth potential.

Tolerance for Risk

Your risk tolerance is the degree of variability in investment returns that you are willing to live with. You should have a realistic understanding of your ability and willingness to stomach large swings in the value of your TSP account. For example, if you take on too much risk, you might panic and sell at the wrong time.

Diversifying your TSP account among several funds plays a major role in reducing risk. For instance, if one of your TSP funds experiences a loss, the other funds may have a positive return at the same time, thus balancing out your risk. Having a diversified TSP account is a wise practice and the benefits of diversification generally outweigh the risks of diversification.

If you invest all your money in a single TSP fund and it has a bad year, you could lose a sizeable portion of your account. However, if only 20% of your money was in that fund, you still have the other 80% of your account working for you. As shown in the prior table, TSP Fund Returns by Year, one year's best performing fund can be the next year's worst - the table clearly demonstrates the importance of diversification.

We use an application called Riskalyze[17] to help you see just how much risk you are taking or need to take in your TSP account. Riskalyze provides you with a clear picture of where you are in the risk spectrum and where you need to be. Simply put, it does a better job at capturing your appetite and capacity for risk.

A major mistake made by many TSP participants is that when the markets pull back, they sell to protect their account and lock-in horrible losses. To exacerbate this lapse in judgement, they then most likely sit out of the recovery and wait until they feel comfortable to get back in the market, which is usually at or near the top.

The Riskalyze Risk Number[18] and corresponding risk/reward range (your comfort zone) allows you to quantify your level of risk. Most risk tolerance questionnaires are very subjective and do a poor job of accurately pinpointing your appetite for risk. With Riskalyze you are empowered by transparent, objective, well-defined, actionable expectations and the probability of success is quantified and unemotional.

Riskalyze is a great tool to quantify your risk, but what does your Risk Number mean? As you can see in the graphic to the right, if you score a 54 out of a maximum score of 99, you are comfortable with the risk of losing 11% with the opportunity of gaining 17% over the next six months.

If you can understand your level for risk, then you won't feel panicked at every bump or blip in your TSP account. To help determine your risk profile, consider the following definitions:

- *Conservative* – You can withstand and recover from losses up to a maximum of 5% of your TSP account within a given year. Risk Number Range: 1-40.

- *Moderate* – You can withstand and recover from a 5% to 15% loss in your TSP account within a given year. Risk Number Range: 40-65.

- *Aggressive* **–** You can withstand and recover from a 15% or more loss in your TSP account over the next six months. Risk Number Range: 65-99.

Investment Objective

Your investment objectives will become clear once you have defined your financial goals, your time horizon for retirement, and your tolerance for risk. Simply defined, an investment objective is a set of goals you have for your portfolios. The portfolios could have different objectives based on the account and the purpose in retirement. The portfolios could be growth-orientated, income-driven, or a combination of both.

Select the TSP funds based on your risk tolerance and future objectives to become a TSP millionaire.

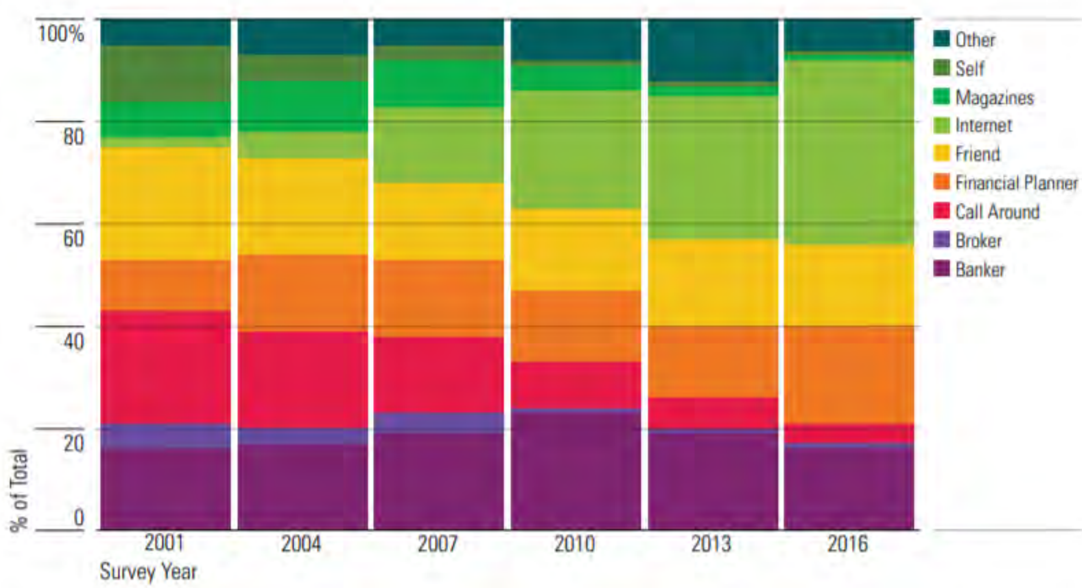
Lesson #5: Ward off the "set-it-and-forget-it" syndrome

As discussed earlier, in 2021, the FRTIB (the agency that oversees and administers the TSP) commissioned Gallup to survey a sample of some 36,000 TSP participants[3]. The survey revealed that 31% said they simply never changed their contribution amounts, meaning an increase over last year's rates, and 26% cited inertia as their top reason for not contributing at least 5% toward the TSP. Inertia is a well-documented phenomenon by experts who study behavioral finance. It is a condition where investors are comfortable doing nothing. Investors worry about making the wrong decision and faced with too many choices, they do not know what to do. They dislike tasks that entail making multiple decisions, so they do nothing.

When looking at retirement accounts in general, it is interesting to note where most participants get their financial advice. Over time, the internet has become the place of choice for the information. Changes in investor behaviors have been noted in responses in the Survey of Consumer Finances (SCF)[19].

The SCF is a triennial cross-sectional survey of U.S. families conducted by the Federal Reserve Board. The SCF specifically asks respondents about information sources used when making savings and investment decisions. The exact text of the question is: How do you (and your [spouse/partner]) make decisions about savings and investments? (Do you call around, read newspapers, review material you get in the mail, use information from television, radio, an online service, or advertisements? Do you get advice from a friend, relative, lawyer, accountant, banker, broker, or financial planner? Or do you do something else?)

The chart below shows information from the study where the first information source noted by the respondent is deemed to be the "primary" source of savings and investment decisions for the respondent and or household.



Source: Survey of Consumer Finances

The chart above demonstrates the growing importance of the internet as an investment advice source for households across America. For example, while only 2% of households named the internet their primary information source in 2001, the share increased to 36% by 2016. This is more than the next two advice sources combined (financial planner at 19% and a friend at 16%). It is very interesting to note that 60% of retirement plan participants get their investment information from either the internet, friends, magazines, or some other source.

A recent study by Morningstar showed the importance of making the right choice when joining a retirement plan[20]. So, let's look at the three paths you can choose from when enrolling in the TSP and draw conclusions from the Morningstar study. The chart below highlights the three paths that are available to you when enrolling in the TSP and the amount of investment knowledge you need.

Source: Morningstar

1. *Self-Selection* – This is the do-it-yourself path. Under this approach, you are making the investment decisions and selecting the funds. As mentioned above, maybe you get your information from the internet or a friend. This option requires that you are very knowledgeable on investing and retirement planning. According to the Morningstar survey, self-selection delivers the worst retirement outcomes for the typical participant and requires the highest participant expertise.

2. *Lifecycle Funds* – As we have discussed earlier in this guide, these funds are designed to adjust the asset allocation, or glide path, based on your age and the year you want to retire. It treats everyone the same; a one-size-fits-all approach. As noted, the glide path may not be the best fit for your situation as you near retirement. Not everyone has the same risk tolerance or retirement objectives.

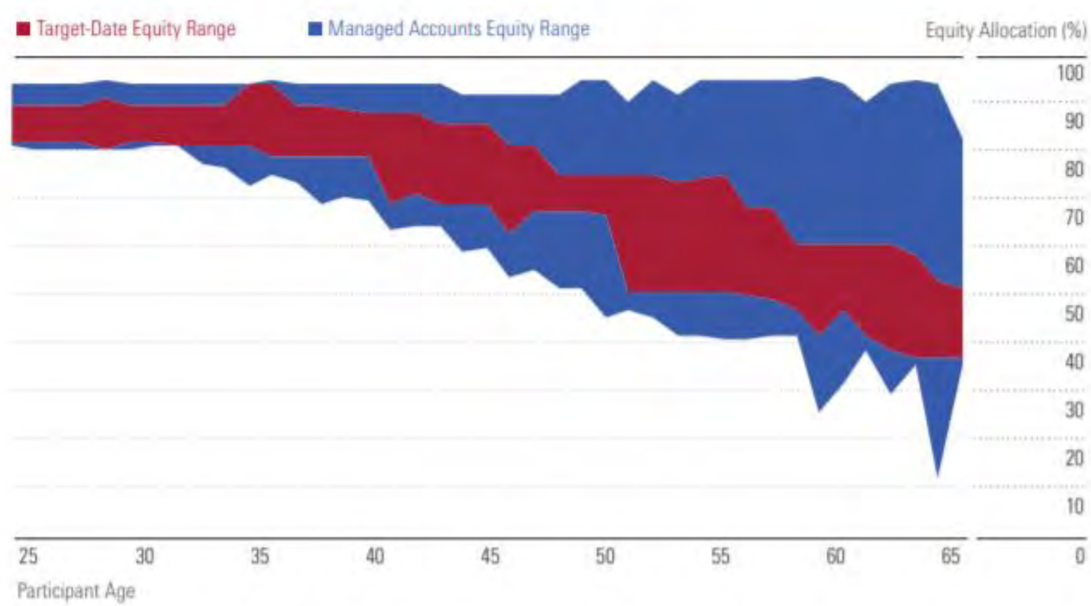
3. *Financial Advisor/Managed Accounts* – Under this path, you work with a financial advisor, and they customize a portfolio of the funds available in the TSP based on your risk profile, time horizon, and retirement objectives that fit your unique situation. According to the study conducted by Morningstar, participants are best served meeting regularly with a financial advisor and it provided the best retirement outcomes.

Lifecycle and Managed Accounts Enrollment Paths

So, if you don't want to spend the time to educate yourself on current investing principals and retirement planning, let's look at the Lifecycle fund option and the managed account option and see which one is the better path.

In the Morningstar study, they analyzed several target date fund glide paths from different investment providers. Remember the Lifecycle funds in the TSP are considered target date funds. In the chart below, you can see the range of the equity portion at the various ages of the participant. The equity range for the target date funds is in red and the managed account's equity range is shown in the dark blue.

As you know, a target date fund uses the participant's year of retirement as the sole variable to determine the suitable asset allocation. In contrast, when working with a financial advisor, they can collect a vast amount of information on you and your retirement objectives to determine a personalized asset allocation portfolio. These differences are shown below where the equity allocations for participants who are in a target date fund have a narrower range as compared to the participants that are invested in a managed account that have a customized portfolio to fit their goals and objectives.



Source: Morningstar

Many TSP participants are lulled into a sense of complacency by the simplicity of their TSP accounts. They are led to believe that they can simply choose a fund, set up a contribution amount, and their account will grow on autopilot. However, as we have already shown, this is may not always be the case.

Work with a financial advisor to manage your account to become a TSP millionaire.

Lesson #6: Refrain from taking a withdrawal or a loan from your account

Taking a loan or withdrawal from your account before you retire can have a significant negative impact on the amount of money you will have in your TSP account when you retire.

As you know, the TSP allows for 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.

TSP participants may also 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 and includes a 10% early withdrawal penalty if the person is younger than age 59 ½.

Loan usage in the TSP has remained somewhat steady over the past five years with 8.8% of participants taking out loans in 2019. Loan usage has consistently been highest among the 40-49 age group. Hardship withdrawals increased in 2019 when compared to the previous four years. Additionally, hardship withdrawal usage was also the highest among the age 40-49 age group with 4.7% of participants taking a hardship withdrawal in 2019[2].

Reasons why not to take a loan from your TSP

There are many reasons why you should not borrow from your TSP account. Listed below are some of the most important ones[21]:

1. The repayment will cost you more than your original contributions.

The main advantage of a loan from your TSP account is that you are simply borrowing from yourself at a very low interest rate. This becomes questionable once you examine how you will have to repay the money. Funds that you borrow were most likely contributed on a pre-tax basis, but you will pay yourself back for the loan with after-tax money. If you are in the 24% tax bracket, for example, every $1 you earn to repay your loan leaves you with only 76 cents for that purpose and the rest goes to income tax.

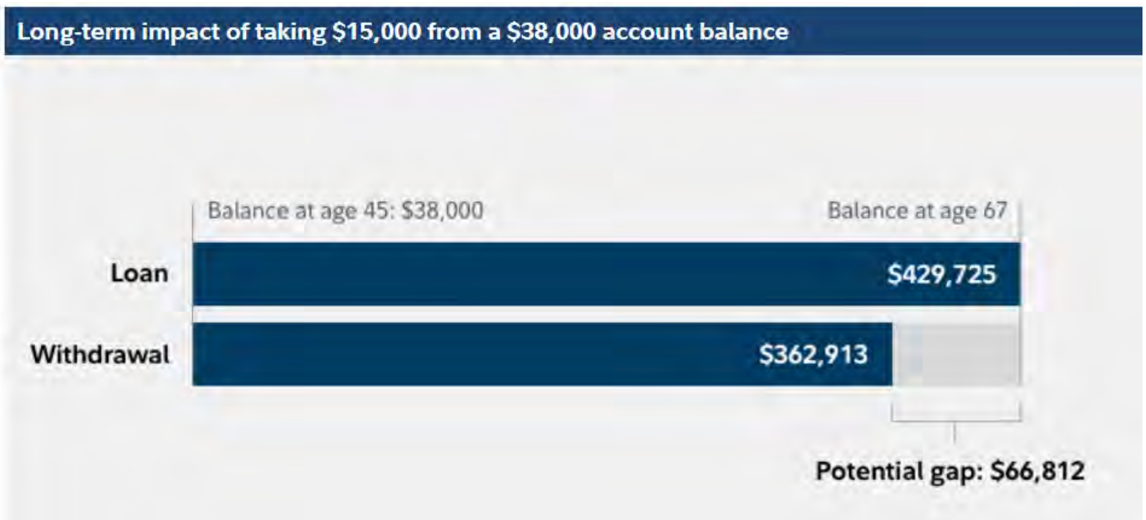
2. The borrowed funds aren't earning any investment return.

While you are borrowing funds from your TSP account, the funds will not be earning any investment return. There is a significant opportunity cost equal to the lost growth on the borrowed funds. For example, if your TSP account has a total return of 8% for a year in which funds have been borrowed, the cost on the loan is the interest rate of the loan (which is currently 1.375% as of 8/31/2021) PLUS the 8% return, which is a total of 9.375%. That's an expensive loan, especially considering today's low interest rate environment.

3. You may contribute less to the TSP while you have the loan.

If you borrow money from your TSP account, you may be unable to afford to make contributions while you are repaying the loan. Such a freeze in additional funding will deprive your TSP account of increasing in value of the contributions and compound earnings. The gap in what you might have made is wider still because your skipped contributions lead to missed matches from your agency.

It might be tempting or a requirement to reduce or pause your contributions while you are paying off your loan. However, keeping up with your regular contributions is essential to maintaining your retirement strategy[22]. As you can see in the chart below, taking a $15,000 loan from a $38,000 account balance when you are 45, could leave you with a potential shortage of $66,812 when you retire.



In this hypothetical withdrawal scenario, a total of $23,810 is taken from the account so that 37% ($8,810) of the withdrawal is set aside for taxes and penalties and the remaining amount ($15,000) is received, leaving $14,190 in remaining balance at age 45. In this hypothetical loan scenario, the loan period is 5 years, starting at age 45, and the loan interest rate is 6.5%. The hypothetical 22-year time frame between ages 45 and 67, assumes an annual income of $75,000 with a 1.5% increase yearly, a personal rate of return of 4.5%, an employee contribution amount of 5%, and an employer contribution amount of 5%. Both scenarios assume there are no additional loans or withdrawals during the hypothetical 22-year time frame. Your own account may earn more or less than this example, and taxes are due upon withdrawal. Loans are repaid into the retirement account using after-tax money, and that money will be taxed a second time when it's withdrawn again.

Source: Fidelity

Reasons not to take a withdrawal from your TSP.

The TSP allows for hardship and in-service withdrawals while you are still working for the federal government or a member of the uniformed services. An in-service withdrawal can have a serious negative impact on your TSP account. The purpose of your TSP account is to accumulate savings so that you will have income during retirement. Some of the reasons why you should not take a withdrawal from your account include:

1. Withdrawals permanently reduce your retirement savings as well as any earnings you would have earned.

2. Withdrawals may be subject to income taxes or other penalties.

3. If you are a married FERS participant or a member of the uniformed services, your spouse must sign a consent waiver for your in-service withdrawal.

Consider not taking a loan or a withdrawal to become a TSP millionaire.

Lesson #7: Side-step using a newsletter or web site for trading instructions

There is no shortage of people and companies trying to get your attention to help manage your TSP account. Many of these services charge a monthly or annual subscription fee. You want to do your due diligence before you engage with one of these services and make sure you ask these very important questions before you subscribe to any service:

1. **Are they an investment fiduciary?**

   Very few investors know the importance of selecting a fiduciary for their financial wellness. A fiduciary (we often use the generic term, "financial advisor") holds a legal and ethical relationship of trust with you, and they have a legal obligation to prudently take care of your money or assets. In this context a *financial advisor* may be a registered investment advisor (RIA), a FINRA-administered Series 65 licensed investment advisor representative (IAR), or the trust department of a bank.

   When a financial advisor has a fiduciary duty to you, they must act in a way that will financially benefit you. The financial advisor who has a fiduciary duty is called *the fiduciary*, and to whomever the duty is owed is called the principal or the beneficiary. If the fiduciary breaches their responsibilities to you, they would need to account for their ill-gotten profit, and you are entitled to damages. Financial advisors who are fiduciaries hold a relationship of trust by which they must abide. Fiduciary duty is the ethical obligation to act solely in your best interest.

   Fiduciary commitment eliminates conflict of interest concerns and makes their advice more trustworthy. Fiduciaries must:

   - Put your best interests before their own, seeking the best prices and terms.
   - Act in good faith and provide all relevant facts to you.
   - Avoid conflicts of interest and disclose any potential conflicts of interest to you.
   - Do their best to ensure the advice they provide you is accurate and thorough.
   - Avoid using your assets to benefit themselves, such as purchasing securities for their own account before buying them for you.

   Most of the investment related subscription service companies for the TSP are not fiduciaries and may not have your best interest in mind. Their sole purpose is to provide information for educational purposes only. As an example, enclosed below is a typical "term of service" as described on a web site of a TSP investment subscription service and highlighted are some of the areas that demonstrate that they do not act in a fiduciary capacity[23]. What is most interesting is that they recommend you seek the advice of a qualified and registered securities professional before making any investment. We have highlighted parts to pay special attention to.

   We are a publisher. We provide the Services for informational and educational purposes. You understand that the views expressed in the Services are the authors' own opinions. You understand that no content published as part of the Services constitutes a recommendation that any particular investment, security, portfolio of securities, transaction or investment strategy is suitable for any *specific person. You further understand that none of the creators or providers of our Services will advise you personally concerning the nature, potential, value or suitability of any particular investment, security, portfolio of securities, transaction, investment strategy or other matter. Accordingly, do not attempt to contact them seeking personalized investment advice, which they cannot provide. To the extent any of the content published as part of the Services may be deemed to be investment advice, such information is impersonal and not tailored to the investment needs of any specific person.*

Past performance, whether actual or indicated by historical tests of strategies, is no guarantee of future performance or success. You are responsible for your own investment research and decisions and should seek the advice of a qualified and registered securities professional before making any investment. Investing involves a substantial amount of risk, and the securities in which you invest may be volatile and may depreciate rapidly.

We assume no liability for investment or other decisions based upon any of the information made available on the Site. We specifically disclaim any and all liability for loss arising out of any action taken in reliance on this information, including but not limited to market value or other loss on the sale or purchase of any security, instrument, product, service, or any other matter.

Source: TSP Folio

So why would you use their trading signals for your TSP account if they don't take any responsibility for your account? You need to work with a fiduciary that is contractually obligated to put your best interests first and foremost. Redhawk is a registered investment advisor (RIA) and acts in a fiduciary capacity when managing individual's TSP accounts. We have developed key principles to follow when serving as a fiduciary, calling these principles the Fiduciary Promise. To the right we show the Fiduciary Promise principles which represents the four elements that we promise to provide to you.

Source: Redhawk Wealth Advisors, Inc.

2. **Are they registered with the Securities Exchange Commission as an RIA?**
An RIA is a business entity that is registered with the Securities Exchange Commission (SEC) and has been approved by the SEC or the state(s) in which the RIA operates.

An RIA firm is represented by investment advisor representatives (“IAR” or “IARs”), who are commonly called financial advisors and who have met the licensing or examination requirements enforced by the regulatory body overseeing the RIA firm. The primary responsibility of an IAR is to provide investment related advice. According to regulations, IARs can only offer advice on topics in which they have passed the appropriate examinations. An IAR must register with an RIA firm and receive compensation by charging a fee.

In most states, IARs are required to pass the Series 65 exam. In addition to passing the appropriate exam, an IAR must be registered with the proper state authorities. To expand their knowledge of financial products and principles, many IARs hold either the Certified Financial Planner (“CFP”), Accredited Investment Fiduciary (“AIF”), or Chartered Financial Analyst (“CFA”) designations.

As fiduciaries regulated under the Investment Advisers Act of 1940, RIAs are held by law to the highest standard of responsibility to you, therefore upholding them to always act in your best interest. This encourages a level of personalized service not always found in investor-financial advisor relationships.

3. **Do they manage real money or provide information for educational purposes?**
There is a huge difference in managing real money in a real account for a real person versus providing information for that person to act on. Many of the investment subscriptions tout superb investment performance and results over long periods of time. Many of these web sites and newsletters use back tested or hypothetical performance. While it may be enticing when you see these results, you should also proceed with caution.

If the company that publishes the investment suggestions is not registered as an RIA, they are not held to any standards as to how they calculate or show investment performance. They can literally show anything because they are not regulated by the SEC.

Hypothetical performance data refers to performance data that is not the performance of actual client portfolios[24]. It is also sometimes referred to as simulated performance data. There are different types of hypothetical performance data, including back-tested performance data and model performance data. These have many flaws, and it does not reflect real performance that can be relied upon.

Performance results generated from back-tested models draw increased regulatory scrutiny and pose serious compliance risks because investors have no guarantee that the investment manager used the suggestions/signals generated by these methods in a real-time basis, and such results do not represent actual performance data[25].

Several critical elements are excluded when calculating a hypothetical return:

- The results do not represent the results of actual trading using client assets but were achieved by means of the retroactive application of a model that was designed with the benefit of hindsight.

- The back-tested performance does not reflect the deduction of trading fees, buy and sell spreads, or other expenses.

- The results assume the transactions were processed at the time the signals were communicated to the participant and do not consider normal trading risk and timing to execute the trades. This timing can have substantial differences during market volatility when prices are moving extremely fast.

There is only one way to ensure that the performance shown is accurate and a fair representation of the performance achieved and that is if the investment manager follows the Global Investment Performance Standards (GIPS)[26]. GIPS outlines a set of voluntary standards used by investment managers throughout the world to ensure the full disclosure and fair representation of their investment performance. The goal of the standards is to make it possible for investors to compare one firm's performance against that of another firm. The Global Investment Performance Standards were created by the CFA Institute, a global association for investment management professionals, and are governed by the GIPS Executive Committee.

So how can you trust the investment performance that these subscription services publish? You can't!

Work with a financial advisor that's a fiduciary to become a TSP millionaire.

Lesson #8: Steer clear from severe market downturns

Do you want your TSP account to do well in a bull market, when prices are rising or are expected to rise? Do you want your TSP account to go defensive and preserve capital in a bear market, when a market experiences prolonged price declines? To answer these questions, let's look at two distinct asset allocation strategies:

Strategic Asset Allocation

Strategic asset allocation is a target allocation of TSP funds you might expect to have in place for a long period of time, typically called a "buy-and-hold" approach. For example, you might have 50% of your TSP account balance in the C Fund and 50% in the G Fund. This target allocation might be expected to remain the same and you would have to re-balance your account back to the original allocation because differing returns in each fund would change the initial 50/50 allocation over time. Strategic asset allocation looks more at the overall risk objective of your TSP account, and therefore takes a long-term view. Under this type of strategy your assets are always allocated in the same manner and always invested in the market.

Traditional buy-and-hold asset allocation strategies, such as the common 60% stocks and 40% bonds portfolio, were originally built for large institutions that have "infinite" time horizons like pension plans and endowments. However, most investors don't have an infinite time horizon. In fact, dramatic or large drawdowns in investments can have far-reaching consequences. While institutions can continue to hold their positions during market downturns and may be able to contribute more capital, you may be reliant on withdrawals from your account to support your lifestyle. A loss outside your risk tolerance may mean an impactful change to your financial plan.

Tactical Asset Allocation

Tactical asset allocation is an investment strategy where you would look for investment opportunities in the market. Tactical asset allocation might be that within the stock part of your TSP account, you may want to own more in the S Fund (small-cap companies) than the C Fund (large-cap companies) because small-caps could be a better investment opportunity right now. When large-cap companies look more attractive, you might put more money into the C Fund and allocate less to the S Fund. Tactical asset allocation will give you the opportunity to be invested in the top performing TSP funds.

Tactical asset allocation allows you to move into and out of certain areas of the market. Under this dynamic or active type of strategy, your assets are in growth mode when the market is doing well and go into defensive mode when the market is not doing well. Let's take a closer look at tactical asset allocation.

Let's assume that tactical asset allocation requires a lot more attention and work and you have assigned this role to the financial advisor we spoke about earlier. Tactical asset allocation is an active management portfolio strategy that shifts the percentage of assets held in various TSP funds to take advantage of momentum in certain TSP funds. This strategy allows you to create extra value by leveraging certain situations in the marketplace. Most tactical asset allocation strategies use a quantitative investment model to expose the imbalances among different asset classes.

Performance is an uncontrollable variable, yet the industry always focuses on backward-looking historical performance and track records. Unfortunately, you can never have the performance that already occurred. For most investors, when actual performance differs from their expectations based on past returns, they often make emotion-driven decisions such as chasing returns at market highs or selling in fear near market bottoms. Instead of focusing on the past, our approach would be to manage your TSP account based on drawdown risk. Maximum drawdown risk is a variable that can be effectively managed.

Risk-Guard™ – where our defense is your offense

"Risk-Guard™," is a set of algorithms and an established process to determine when your TSP account should be in "risk on" mode, meaning that it is in growth orientated stock indexed funds (C, S, or I Funds), or it is in "risk off" mode and invested in the defensive G Fund.

The underlying premise of Risk-Guard™ is that up-trending markets tend to have lower volatility and that is when you want to stay invested for as long as possible. Conversely, down-trending markets tend to have higher volatility and you want to go defensive to preserve capital.

It is important to note that our Risk-Guard™ process is not trying to time the market and pick market tops or bottoms or change with every 5-10% correction. Most strategies that try to pull this off end up over-trading and under-delivering. Risk-Guard™ is set up to avoid a severe loss like what happened in 2020 when the S&P 500 dropped over 30% due to COVID-19. You can never time these moves perfectly but the goal of Risk-Guard™ is to avoid a substantial part of a huge, prolonged drawdown.

Drawdowns are the most problematic risk for your TSP account. Put a different way, the most important risk to you is the loss of capital, which is measured by peak-to-trough drawdown (from when the market reached its highest to when it reached its lowest point). Managing drawdown within predefined limits that you can understand will keep you on track toward your financial goals.

Our TSP portfolios are built based on risk-tolerance objectives and are designed to perform within drawdown guidelines. Our stated drawdown risk objectives help you understand when a portfolio is performing within guidelines to stay on track to meet your long-term financial goals. Our approach involves re-engineering an asset allocation portfolio and relabeling its components based on risk from a quantitative perspective. The result is an intelligent portfolio, dynamically managed to fit your needs.

Investment returns are not linear. While any portfolio may have an average annual historical return, it is important to note that every year is different. When a portfolio is on its intended track, the expectation for any rolling time frame (let's say the next six months), will have a range of returns from negative to positive. You should recognize that this is normal and that risk-managed portfolios are engineered to operate within an expected range.

Given the fact that no one can predict future returns, it is important to understand that our TSP portfolios have a range of expected return outcomes. For example, the graphic to the right, is our TSP moderate portfolio that has a risk score of 66 and the expected return over the next six months is between -13.81% to 19.8%.

Source: Riskalyze

Risk-Guard™ is a tactical asset allocation solution that we believe is an effective means to limit the drawdown risk in your TSP account. The Risk-Guard™ philosophy prioritizes managing drawdown risk as a key component for success and has been designed to have two distinct advantages over strategic asset allocation by:

1. *Managing Drawdowns:* by going to "risk off" mode during severe bear markets. This will most likely be the G Fund.

2. *Range of Expected Returns:* by going to "risk on" mode when markets are moving higher. This will include the stock indexed funds that have momentum and are trending with higher returns. It is important that you understand that the performance of our TSP portfolios is designed to have expected returns based on the risk number of each portfolio. The objectives of our TSP portfolios are not designed to pursue returns of the S&P 500 or other major indexes; it is to pursue returns that are in the range of expected returns based on the risk of the portfolio.

By managing drawdowns and overseeing the range of expected returns in your TSP portfolio, we can smooth out the otherwise bumpy ride of the market.

The Pandemic that changed everything.
So, let's see how Risk-Guard™ operated during 2020 when COVID-19 rocked the markets[27]. As a company founded just prior to the 2008 financial crisis, Redhawk knows market turbulence is an inevitable part of a long-term investment strategy. We also understand that the emotional wear and tear of rocky markets can make it even more challenging to stomach.

As you remember, in just a few short months, COVID-19 wreaked havoc on savings and investing for retirement:

- Non-essential businesses were forced to shut down and employees were either furloughed, laid-off, or worked from home.

- People that were unemployed could not contribute to their workplace retirement plan or receive company matching contributions.

- People that lived from paycheck to paycheck did not have any extra money put away to weather the storm.

- People had to take distributions or loans from their retirement plans, which lowered their potential returns in the long run.

- Assets significantly declined in personal and retirement plan accounts.

Also, many large employers decided to suspend matching contributions to retirement plans including Amtrak, Marriott, Macy's, La-Z-Boy, Expedia, Hilton, and Best-Buy. As of late April 2020, 12% of 816 companies representing 12 million workers had suspended matching contributions, according to a Willis Towers Watson survey. An additional 23% said they would or may halt them later in the year. Some workers were forced into retirement and started claiming Social Security benefits earlier than anticipated. When people claim Social Security before their "Full Retirement Age," they receive less in payments than if they had waited.

Between March 4 and March 11, 2020, the S&P 500 index dropped by 12%, landing in bear market territory. On March 12, 2020, the S&P 500 plunged 9.5%, its steepest one-day fall since 1987. Stock markets plunged in the wake of the coronavirus pandemic, with investors fearing that its spread would destroy economic growth. Supported by figures that suggested cases were leveling off in China, investors were initially optimistic about the virus being contained. However, confidence in the market started to wane as the number of cases increased worldwide. Investors were deterred from buying stocks, and this was reflected in the initial downward spiral of the markets. Remember, this is when the S&P 500 lost over 30% in just a few weeks.

Thankfully, the Federal Reserve (the Fed) acted swiftly and began to provide liquidity into the market and started to purchase Treasuries. In a matter of three months, the markets were back to where they started. This was the quickest rebound in the history of the markets.

The markets were very volatile during this period with the volatility index (VIX) ranging from 25.03 to 82.69 (the VIX is an implied volatility value calculated using specific S&P 500 Index option contracts and is used as a sentiment indicator). An index option contract gives the buyer the right, but not the obligation, to buy or sell an underlying index at a strike price on an expiration date. Therefore, a climbing VIX reflects bearish conditions in the S&P 500 and typically the markets. The VIX reached its highest level on 3/16/2020 when it hit 82.69. This was the highest reading for the VIX since 11/20/2008 when it closed at 80.86, which was at its highest during the financial crisis.

On June 8, 2020, the S&P 500 climbed back above where it began the year before the pandemic brought the United States economy to a standstill. After a few weeks of volatility when the market dropped over 30%, the S&P 500 seemed to become resistant to bad news. On April 29, 2020, when the Commerce Department announced that the economy shrank at a nearly 5% annual rate (its fastest drop since the 2008 recession) stocks rose 2.7%. When the Bureau of Labor Statistics published what was essentially the worst employment report on record which showed that more than 20 million jobs were lost in April 2020 driving unemployment to 14.7% (the highest since the Great Depression), stocks rose 1.7%.

How did Risk-Guard™ perform during the pandemic?

Risk-Guard™ has three levels of algorithms that are used when managing risk for your TSP account. These three phases tell us whether we are fully invested in the market or are in a defensive position.

Risk On – when the market is relatively calm. Your account is fully invested in the market with equity exposure in the stock indexed funds (C, S, and I Funds) based on your risk score.

Risk Watch – when the market is experiencing volatility and uncertainty. The "risk watch" signal has tripped, but not enough to go into full risk off mode. We still are fully invested in the markets, but there are things happening in the market that concerns us, and we are very cautious and heighten our watch.

Risk Off – when the market is experiencing heightened volatility. Our algorithms fully kick in and we change the allocations in your TSP account into defensive mode and invest in the G Fund. We only move to risk off mode when we are anticipating a significant market downturn.

As you can see in the following diagram, the S&P 500 reached its all-time high on 2/19/2020. Then on 3/23/2020, the S&P 500 reached its lowest point during the pandemic. So, let's see how Risk-Guard™ behaved in the general market:

- On 2/24/2020, we went to "risk off" and exited equities and went into treasuries.
- On 3/23/2020, the S&P 500 went down 30.64% from its previous high.
- On 4/13/2020, we went to "risk on" and sold the positions in treasuries and invested back into equities. Accounts only experienced a 14.39% loss versus the 30.64% loss of the S&P 500.

In summary, Risk-Guard™ did its job and avoided most of the downturn!

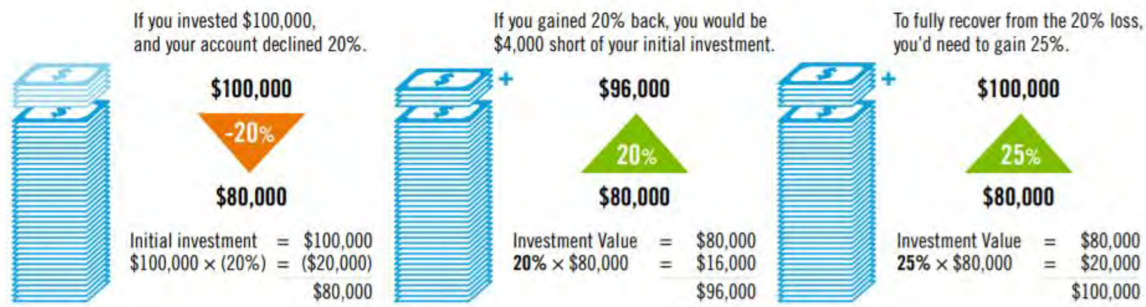
S&P 500
1/1/2020 – 6/11/2020

Source: Redhawk Wealth Advisors, Inc.

Remember, the markets are always forward-looking, and discounts or rewards are based on anticipated headwinds and tailwinds. The markets become extremely volatile when uncertainty exists and is difficult to measure. During the pandemic, stocks swung wildly often suggesting a disconnect with the terrible economic and public health news of the moment. A steady hand is necessary to navigate troubled markets, and with Risk-Guard™ we continue to monitor the market and err on the side of caution via downside protection.

Why is Risk-Guard™ focused on drawdown?
It is basic math. You may retire after a lifetime of hard work just as the market falls. Your TSP account balance would therefore be negatively impacted, and the potential effect could come as a shock. We talked about this earlier in this guide when discussing sequence of returns risk.

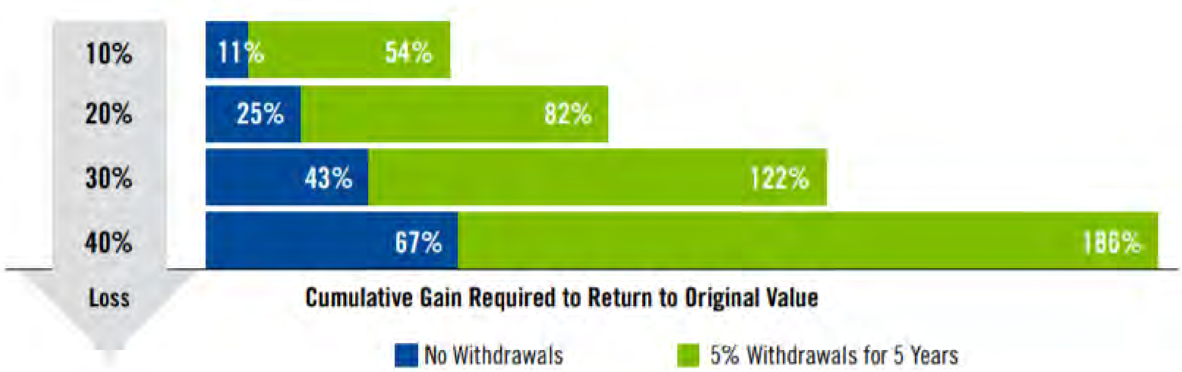
Losses have more of an impact than gains
For example, if your $100,000 TSP account lost 20%, it would require a 25% gain to make up for the loss (see the following chart)[28]. After a loss, it takes a greater gain to return to your original value.



Source: Franklin Templeton

Mathematical catch-up game

Let's look at some more examples (see the chart below). If your TSP account lost 40%, it would require a 67% gain, without taking any withdrawals, to return to the original value[28]. What's even more worrisome is that if you were in retirement and taking 5% out of your TSP account for living expenses, it would take a gain of 186% to make up for the sizeable loss! Like we said earlier, it's basic math and it shows how important it is to avoid large downturns in the market.



Source: Franklin Templeton

It would be bad luck that as you begin retirement and start withdrawing assets from your TSP account for day-to-day living expenses the value of your account decreases significantly. Too many TSP participants fail to realize that it is not only about the losses in one's account, but also the loss of time in which to recover. What the cold-hearted math of stock market losses makes painfully clear is that you need to protect your TSP account against big losses.

Avoid significant market drawdowns if you want to become a TSP millionaire.

Lesson #9: Make sure you have a holistic financial plan that includes your TSP

Often, when federal employees enroll in the TSP, it is done without thinking about how the TSP will complement (or complicate) other retirement accounts and retirement income sources, such as Social Security benefits, pensions, IRAs, 401(k)s, 403(b)s, deferred compensation, non-qualified accounts, bank accounts, etc.

Enrolling in the TSP is great, but don't just enroll in it and settle for the "default settings." Meet with a financial advisor and qualified tax professional to see what forward-looking tax planning and advanced retirement income planning options might be in your best interest. Rather than just enrolling in the TSP and forgetting about it until you are near retirement, find qualified professionals, even if it is just for one meeting, because you do not know what you do not know.

A financial advisor associated with Redhawk can help you evaluate your TSP fund choices within the context of a holistic, tailored retirement plan. How much will you need to save for a comfortable retirement? Will your TSP fund choices, and your contribution percentage, get you to that goal?

There are many benefits to hiring a financial advisor. A fiduciary-focused financial advisor can help you figure out your savings strategies, retirement options, and overall retirement plan. To be sure, a professional opinion can be especially helpful at the beginning of the retirement planning process, when you are trying to set goals. Most importantly, a financial advisor will keep you focused and disciplined toward achieving your goals. There are many financial advisors that offer good advice.

Source: Redhawk Wealth Advisors, Inc.

Another benefit of hiring a financial advisor is that they can save you time. Some financial advisors will actively manage your TSP account, removing a huge burden from your evolving list of decisions. While you will need to periodically meet with your financial advisor to talk about your goals and where your TSP account stands, you won't be responsible for things like periodically rebalancing your accounts, making tactical asset allocation changes, staying on top of market conditions, and assessing various TSP investment options. This is the job of your financial advisor.

If you do hire a financial advisor, make sure that they are a fiduciary. Many advisors say that they are fiduciaries, but many do not function in that capacity. According to rules set by the

Securities and Exchange Commission (SEC) and the Investment Advisers Act of 1940, fiduciaries have five primary responsibilities:

1. Put clients' interests first.
2. Act with the utmost good faith.
3. Provide full and fair disclosure of all material facts.
4. Do not mislead clients.
5. Expose all conflicts of interest.

With the wealth of information at your fingertips, you may think you understand the markets enough to invest for yourself or that getting a financial advisor to manage your TSP account is too expensive. However, investing is challenging, to say the least, and emotional responses in periods of volatility can undo years of past or potential future success.

The services a financial advisor provides go well beyond simply selecting the best TSP funds for you. Financial advisors generally coordinate with a team of professionals and can assist you in a holistic financial plan from budgeting, cash management, wealth planning, investment management, retirement, and estate planning, as well as guidance on taxation (working with a tax professional as part of the team) to help you work toward your goals.

Financial advisors can help you avoid common mistakes

It is well-known that human behavior leads to decisions primarily based on emotion; then the decisions are rationalized using science. Financial advisors can help you avoid common mistakes caused by human behavior by staying informed and remaining objective when making financial decisions on your behalf. People often let emotions and other tendencies get in the way of their financial goals. Ultimately, letting your emotions guide your investing decisions will cost you money.

So how can emotions get in the way of achieving your goals? Studies have proven that inexperienced and unknowledgeable investors have a strong tendency to buy high and sell low (commonly referred to as emotional investing). Typically, when the market is going up the every-day investor wants to buy and when the market is going down, they want to sell. This happens because a positive perception of an investment or market can lead investors to feel they have a higher return at a lower risk than they do, while a negative feeling can lead to predictions of lower returns at a higher risk.

Taking your investment cues based on the fears and goals of others, such as family, friends, co-workers, social media, or news, is called *Social Investing*. Engaging in this behavior can influence you to make decisions based on the emotions of others rather than your own goals. Additionally, allowing behavior patterns to influence your decisions is called *Ego Investing.* This approach may also make you lose sight of your goals. Many investors fall victim to these behaviors and don't heed their own advice. That is where a financial advisor comes in handy, by determining how much cash you will need to provide for your lifestyle against potential market downturns. At the same time, they can help you take advantage of investment opportunities with the rest of your wealth.

The results of research done by Dalbar Inc.[29], a company that studies investor behavior and analyzes investor market returns, consistently show that the average investor earns below-average returns. In Dalbar's 2017 study, they found that investors' biggest behavioral problems are the herding effect and loss aversion. The study showed just how poorly investors perform relative to market benchmarks over time and the reasons for that under-performance.

The study also proves that a do-it-yourself (DIY) investor can't beat an index over the long haul. Indexes do not account for the effect of taxes, trading costs, and fees over time. There are also internal dynamics of an index that affect long-term performance that do not apply to an actual portfolio, such as share buybacks and market-cap valuation. However, even the problems listed above do not fully account for investors' under-performance over time. The key findings of the study show that:

- The average equity mutual fund investor under-performed the S&P 500 by a margin of 4.7%. While the broader market made gains of 11.96%, the average equity investor's return was only 7.26% (see the numbers circled in red on the following graph).

- The average fixed-income mutual fund investor under-performed the Bloomberg Barclays Aggregate Bond Index by a margin of 1.42%. The broader bond market realized a return of 2.65%, while the average fixed-income fund investor's return was 1.23% (see the numbers circled in green on the following graph).

- The 20-year annualized S&P 500 return was 7.68%, and the average equity fund investor's return was only 4.79%, a gap of 2.89% (see the numbers circled in blue on the following graph).

	Investor Returns[1]					
	Equity Funds	Asset Allocation Funds	Fixed Income Funds	Inflation	S&P 500	Bloomberg Barclays Aggregate Bond Index[2]
30 Year	3.98%	1.85%	0.57%	2.65%	10.16%	6.34%
20 Year	4.79%	2.29%	0.48%	2.13%	7.68%	5.29%
10 Year	3.64%	1.78%	0.40%	1.83%	6.95%	4.34%
5 Year	9.83%	4.85%	0.05%	1.40%	14.66%	2.23%
3 Year	3.42%	1.45%	-0.23%	1.25%	8.87%	3.03%
1 Year	7.26%	5.48%	1.23%	2.07%	11.96%	2.65%

Source: Dalbar, 2017.
1. Returns are for the period ended December 30, 2016. Average equity investor, average bond Investor, and average asset allocation investor performance results are calculated using data supplied by the Investment Company Institute. Investor returns are represented by the change in total mutual fund assets after excluding sales, redemptions, and exchanges. This method of calculation captures realized and unrealized capital gains, dividends, interest, trading costs, sales charges, fees, expenses, and any other costs. After calculating investor returns in dollar terms, two percentages are calculated for the period examined: Total investor return rate and annualized investor return rate. Total return rate is determined by calculating the investor return dollars as a percentage of the net of the sales, redemptions, and exchanges for each period.
2. Amended May, 1 2017.

In summary, look for a financial advisor that is knowledgeable in the TSP and will work together with you (and their team) to build a retirement financial plan that is based upon your specific needs, wants, and goals. A financial advisor can be important in helping you manage your TSP account and can bring value to you by:

- Steering you away from making behavioral mistakes like chasing performance.
- Taking advantage of certain asset classes that are in favor.
- Monitoring the markets to manage downside risks.
- Establishing an objective rebalancing strategy for your TSP account.
- Building a complete financial plan that saves you time and keeps you on course.
- Reducing your tax burden.

Have a financial advisor develop a holistic financial plan to become a TSP millionaire.

Lesson #10: Start today and don't wait

At this point, you are probably eager to put this guide to work and start your TSP millionaire journey. Taking action is certainly not an easy step and it will come with many trials and tribulations. The key to success is to just get started. Start today and don't wait. It's never too late to work toward those million dollars in your TSP.

Implementing a plan is the step where the rubber meets the road. During the implementation don't lose momentum, as it can be very tempting to let things slide. I cannot stress enough how important it is to find the right financial advisor first — they will keep your best interests front and center while keeping you focused.

Your financial advisor will go over their planning process, ensure that your vision is considered, and modify their implementation process to fit your needs. I personally find it much easier to break down what is needed into manageable chunks. The key is to buckle down and get it done in the way that works best for you.

We believe the following three steps are the most efficient ways for you to become a TSP millionaire:

Step 1. Find a Financial Advisor Who is a Fiduciary.

This is the most important step because following it will make everything else in the process easier. You want to make sure the financial advisor is a good fit as this will create an ongoing relationship and help your financial advisor to help maintain your financial goals throughout the partnership. Keep in mind that it is critical the financial advisor acts in a fiduciary capacity and has your best interest in mind, not their own. You can find a financial advisor that is with Redhawk and is located near you by visiting www.redhawkwa.com and clicking on "Find an Advisor." It is simple and easy, and all our financial advisors are committed to following our Fiduciary Promise.

The COVID-19 pandemic fostered a new way of working with a financial advisor that may not be located near you. Collaboration technologies, such as Zoom™, have allowed investors to work with financial advisors across the country. Many investors like this new way of interacting because they don't have to drive to an office to meet.

Step 2: Develop a Comprehensive Financial Plan.

Using your goals, financial situation, and financial data, your financial advisor will create a personalized and comprehensive plan. They will also help you implement this plan using Risk-Guard™, applications, and financial planning tools.

This plan will also include your investment policy statement, investment philosophy, and a customized portfolio for your TSP account that will give you the best opportunity to achieve your goals. During this step, if you need estate planning, your financial advisor will coordinate with an attorney to make sure it gets done. If you need insurance, they will work with insurance experts to make sure you get the right solution. Your financial advisor will ensure you have a solid TSP account that is diversified and professionally managed. This is your road map to a better financial outcome.

Step 3: Monitor and Adjust

The very best financial plan is worthless if it isn't monitored correctly. As time goes by, circumstances change, and so should your plan. Today's goal may not be the same as tomorrow's dream. That is why it is important to review your goals and objectives on a regular basis with planning reviews and ongoing monitoring. As your life unfolds, new things become more important to you. Remember to be reasonable with yourself and don't try and tackle the whole thing in one go. This is a process that you will follow for your lifetime.

With time, effort, and partnering with a financial advisor, you can reach your goals and develop peace of mind. While it's easy to get bogged down in the process, stay focused on your end goals — the *why* of what you're doing. Your financial advisor will keep those goals front and center to make this process work for you.

If you have any questions or want help, please call Redhawk Wealth Advisors, Inc. at (833) 693-3388 or email elizabeth@febcnow.com.

Get started now to become a TSP millionaire

Putting it all together to be a TSP millionaire

To bring it all together, I want to show you mathematically how you can become a TSP millionaire. Important Note: if you are of the age and means right now where the TSP millionaire milestone seems way out of reach, all hope is not lost. We will be publishing more about the Risk-Guard™ process that helps people manage "through retirement." For this guide, we will stick to the theme we started with. So, let's look at several hypothetical examples of how you can make the most out of your TSP account!

Example #1 – Starting at age 25 and retiring at age 65:

Age when joining the TSP: 25

Age at retirement: 65

Starting annual compensation: $45,000

Annual % increase in compensation: 2%

Annual pre-tax contribution: 5%

Annual agency match: 4%

Average annual performance (ages 25-49): 9%

Average annual performance (ages 50-65): 6%

When running this option, we assumed that an aggressive portfolio was used for the first 24 years (ages 25-49) and then a moderate portfolio was used for the remaining 15 years until retirement.

As you can see in the chart to the right, this TSP participant would reach the millionaire status when they are age 60!

What is most compelling is that they would only have to contribute $140,873 over their working years to reach this milestone.

TSP Millionaire - Hypothetical Account Balance

Age	Compensation	Annual Contribution	1% Automatic Employing Services Contribution	Agency Match	Total Contribution	Account Balance
25	$45,000	$2,250	$450	$1,800	$4,500	$4,703
26	$45,900	$2,295	$459	$1,836	$4,590	$9,922
27	$46,818	$2,341	$468	$1,873	$4,682	$15,708
28	$47,754	$2,388	$478	$1,910	$4,775	$22,112
29	$48,709	$2,435	$487	$1,948	$4,871	$29,192
30	$49,684	$2,484	$497	$1,987	$4,968	$37,011
31	$50,677	$2,534	$507	$2,027	$5,068	$45,638
32	$51,691	$2,585	$517	$2,068	$5,169	$55,147
33	$52,725	$2,636	$527	$2,109	$5,272	$65,620
34	$53,779	$2,689	$538	$2,151	$5,378	$77,146
35	$54,855	$2,743	$549	$2,194	$5,485	$89,821
36	$55,952	$2,798	$560	$2,238	$5,595	$103,752
37	$57,071	$2,854	$571	$2,283	$5,707	$119,054
38	$58,212	$2,911	$582	$2,328	$5,821	$135,852
39	$59,377	$2,969	$594	$2,375	$5,938	$154,283
40	$60,564	$3,028	$606	$2,423	$6,056	$174,498
41	$61,775	$3,089	$618	$2,471	$6,178	$196,658
42	$63,011	$3,151	$630	$2,520	$6,301	$220,942
43	$64,271	$3,214	$643	$2,571	$6,427	$247,543
44	$65,557	$3,278	$656	$2,622	$6,556	$276,672
45	$66,868	$3,343	$669	$2,675	$6,687	$308,561
46	$68,205	$3,410	$682	$2,728	$6,820	$343,459
47	$69,569	$3,478	$696	$2,783	$6,957	$381,640
48	$70,960	$3,548	$710	$2,838	$7,096	$423,403
49	$72,380	$3,619	$724	$2,895	$7,238	$469,073
50	$73,827	$3,691	$738	$2,953	$7,383	$504,821
51	$75,304	$3,765	$753	$3,012	$7,530	$542,867
52	$76,810	$3,840	$768	$3,072	$7,681	$583,350
53	$78,346	$3,917	$783	$3,134	$7,835	$626,421
54	$79,913	$3,996	$799	$3,197	$7,991	$672,237
55	$81,511	$4,076	$815	$3,260	$8,151	$720,967
56	$83,141	$4,157	$831	$3,326	$8,314	$772,789
57	$84,804	$4,240	$848	$3,392	$8,480	$827,891
58	$86,500	$4,325	$865	$3,460	$8,650	$886,474
59	$88,230	$4,412	$882	$3,529	$8,823	$948,750
60	$89,995	$4,500	$900	$3,600	$9,000	$1,014,944
61	$91,795	$4,590	$918	$3,672	$9,179	$1,085,296
62	$93,631	$4,682	$936	$3,745	$9,363	$1,160,058
63	$95,503	$4,775	$955	$3,820	$9,550	$1,239,498
64	$97,414	$4,871	$974	$3,897	$9,741	$1,323,902
65	$99,362	$4,968	$994	$3,974	$9,936	$1,413,570
Total		**$140,873**	**$28,175**	**$112,698**	**$281,745**	**$1,413,570**

In this hypothetical TSP account scenario, the participant starts contributing at age 25 through age 65. Their annual compensation starts at $45,000 per year and increases 2% each year thereafter. In this hypothetical scenario, the participant contributes at 5% of compensation starting at age 25 and continues at the same contribution rate through age 65. The agency matching contributions is based on 4% of annual compensation. This hypothetical account scenario incorporates an annualized personal rate of return of 9%, net of TSP account expenses, for the age range from 25 through age 49 and participant and agency contributions for the year they are contributed have an annualized personal rate of return of 1/2 of the 9%. This hypothetical account scenario incorporates an annualized personal rate of return of 6%, net of TSP account expenses, for the age range from 50 through age 65 and participant and agency contributions for the year they are contributed have an annualized personal rate of return of 1/2 of the 6%. This hypothetical account scenario does not have loans or withdrawals taken from the account. Your own account may earn more or less than this example. This information is intended to be educational and is not tailored to the investment needs of any specific investor.

Source: Redhawk Wealth Advisors, Inc.

This example shows you the importance of diligently contributing to the plan and letting your account balance compound year-after-year.

Example #2 – Starting at age 35 and retiring at age 65:

Age when joining the TSP: 35

Age at retirement: 65

Starting annual compensation: $55,000

Annual % increase in compensation: 2%

Annual pre-tax contribution: 8%

Annual agency match: 4%

Average annual performance (ages 35-59): 9%

Average annual performance (ages 60-65): 6%

When running this option, an aggressive portfolio was used for the first 24 years (ages 35-49) and then a moderate portfolio was used for the remaining 5 years until retirement.

TSP Millionaire - Hypothetical Account Balance

Age	Compensation	Annual Contribution	1% Automatic Employing Services Contribution	Agency Match	Total Contribution	Account Balance
35	$55,000	$4,400	$550	$2,200	$7,150	$7,472
36	$56,100	$4,488	$561	$2,244	$7,293	$15,765
37	$57,222	$4,578	$572	$2,289	$7,439	$24,958
38	$58,366	$4,669	$584	$2,335	$7,588	$35,133
39	$59,534	$4,763	$595	$2,381	$7,739	$46,383
40	$60,724	$4,858	$607	$2,429	$7,894	$58,807
41	$61,939	$4,955	$619	$2,478	$8,052	$72,514
42	$63,178	$5,054	$632	$2,527	$8,213	$87,623
43	$64,441	$5,155	$644	$2,578	$8,377	$104,263
44	$65,730	$5,258	$657	$2,629	$8,545	$122,576
45	$67,045	$5,364	$670	$2,682	$8,716	$142,716
46	$68,386	$5,471	$684	$2,735	$8,890	$164,851
47	$69,753	$5,580	$698	$2,790	$9,068	$189,163
48	$71,148	$5,692	$711	$2,846	$9,249	$215,853
49	$72,571	$5,806	$726	$2,903	$9,434	$245,139
50	$74,023	$5,922	$740	$2,961	$9,623	$277,257
51	$75,503	$6,040	$755	$3,020	$9,815	$312,468
52	$77,013	$6,161	$770	$3,081	$10,012	$351,052
53	$78,554	$6,284	$786	$3,142	$10,212	$393,318
54	$80,125	$6,410	$801	$3,205	$10,416	$439,602
55	$81,727	$6,538	$817	$3,269	$10,625	$490,269
56	$83,362	$6,669	$834	$3,334	$10,837	$545,717
57	$85,029	$6,802	$850	$3,401	$11,054	$606,383
58	$86,729	$6,938	$867	$3,469	$11,275	$672,740
59	$88,464	$7,077	$885	$3,539	$11,500	$745,304
60	$90,233	$7,219	$902	$3,609	$11,730	$802,105
61	$92,038	$7,363	$920	$3,682	$11,965	$862,555
62	$93,879	$7,510	$939	$3,755	$12,204	$926,879
63	$95,756	$7,661	$958	$3,830	$12,448	$995,313
64	$97,671	$7,814	$977	$3,907	$12,697	$1,068,110
65	$99,625	$7,970	$996	$3,985	$12,951	$1,145,537
Total		**$186,470**	**$23,309**	**$93,235**	**$303,013**	**$1,145,537**

In this hypothetical TSP account scenario, the participant starts contributing at age 35 through age 65. Their annual compensation starts at $55,000 per year and increases 2% each year thereafter. In this hypothetical scenario, the participant contributes at 8% of compensation starting at age 35 and continues at the same contribution rate through age 65. The agency matching contributions is based on 4% of annual compensation. This hypothetical account scenario incorporates an annualized personal rate of return of 9%, net of TSP account expenses, for the age range from 35 through age 59 and participant and agency contributions for the year they are contributed have an annualized personal rate of return of 1/2 of the 9%. This hypothetical account scenario incorporates an annualized personal rate of return of 6%, net of TSP account expenses, for the age range from 60 through age 65 and participant and agency contributions for the year they are contributed have an annualized personal rate of return of 1/2 of the 6%. This hypothetical account scenario does not have loans or withdrawals taken from the account. Your own account may earn more or less than this example. This information is intended to be educational and is not tailored to the investment needs of any specific investor.

Source: Redhawk Wealth Advisors, Inc.

Because this person started contributing to the TSP later in life, they don't have as many years to save for retirement. That is why they must start contributing at a higher rate of 8% of their paycheck and investing in an aggressive portfolio until 5 years before retirement.

As you can see in the chart above, this TSP participant would reach the millionaire status when they are age 64!

They would have to contribute $186,470 over their working years to reach this milestone.

This example shows you that starting to save for retirement later in life means that you must contribute more to reach that TSP millionaire status.

Example #3 – Starting at age 45 and retiring at age 65:

Age when joining the TSP: 45

Age at retirement: 65

Starting annual compensation: $65,000

Annual % increase in compensation: 2%

Annual pre-tax contribution: 19%

Annual agency match: 4%

Average annual performance (ages 45-65): 9%

When running this option, an aggressive portfolio was used for the entire 20 years (ages 45-65) since they started contributing later in life and only had 20 years to save for retirement.

TSP Millionaire - Hypothetical Account Balance

Age	Compensation	Annual Contribution	1% Automatic Employing Services Contribution	Agency Match	Total Contribution	Account Balance
45	$65,000	$12,350	$650	$2,600	$15,600	$16,302
46	$66,300	$12,597	$663	$2,652	$15,912	$34,397
47	$67,626	$12,849	$676	$2,705	$16,230	$54,454
48	$68,979	$13,106	$690	$2,759	$16,555	$76,654
49	$70,358	$13,368	$704	$2,814	$16,886	$101,199
50	$71,765	$13,635	$718	$2,871	$17,224	$128,306
51	$73,201	$13,908	$732	$2,928	$17,568	$158,212
52	$74,665	$14,186	$747	$2,987	$17,919	$191,177
53	$76,158	$14,470	$762	$3,046	$18,278	$227,483
54	$77,681	$14,759	$777	$3,107	$18,643	$267,439
55	$79,235	$15,055	$792	$3,169	$19,016	$311,380
56	$80,819	$15,356	$808	$3,233	$19,397	$359,674
57	$82,436	$15,663	$824	$3,297	$19,785	$412,720
58	$84,084	$15,976	$841	$3,363	$20,180	$470,953
59	$85,766	$16,296	$858	$3,431	$20,584	$534,849
60	$87,481	$16,621	$875	$3,499	$20,996	$604,925
61	$89,231	$16,954	$892	$3,569	$21,415	$681,748
62	$91,016	$17,293	$910	$3,641	$21,844	$765,932
63	$92,836	$17,639	$928	$3,713	$22,281	$858,149
64	$94,693	$17,992	$947	$3,788	$22,726	$959,131
65	$96,587	$18,351	$966	$3,863	$23,181	$1,069,677
Total		**$318,424**	**$16,759**	**$67,037**	**$402,220**	**$1,069,677**

In this hypothetical TSP account scenario, the participant starts contributing at age 45 through age 65. Their annual compensation starts at $65,000 per year and increases 2% each year thereafter. In this hypothetical scenario, the participant contributes at 19% of compensation starting at age 45 and continues at the same contribution rate through age 65. The agency matching contributions is based on 4% of annual compensation. This hypothetical account scenario incorporates an annualized personal rate of return of 9%, net of TSP account expenses, for the age range from 45 through age 65 and participant and agency contributions for the year they are contributed have an annualized personal rate of return of 1/2 of the 9%. This hypothetical account scenario does not have loans or withdrawals taken from the account. Your own account may earn more or less than this example. This information is intended to be educational and is not tailored to the investment needs of any specific investor.

Source: Redhawk Wealth Advisors, Inc.

Because this person started contributing to the TSP at age 45, they don't have as many years to save for retirement. That is why they must start contributing 19% of their paycheck and investing in an aggressive portfolio for the entire 20 years before retirement.

As you can see in the chart above, this TSP participant would reach the millionaire status when they are age 65!

They would have to contribute $318,424, which is significantly more than if they started at age 25 or 35 to reach this milestone.

This example shows you that you can still reach the TSP millionaire status, but you must contribute quite a bit more each paycheck to make up for the lost time that you didn't save.

Example #4 – Starting at age 30 and retiring at age 56:

Age when joining the TSP: 30

Age at retirement: 56

Starting annual compensation: $50,000

Annual % increase in compensation: 2%

Annual pre-tax contribution: 12%

Annual agency match: 4%

Average annual performance (ages 30-56): 9%

TSP Millionaire - Hypothetical Account Balance

Age	Compensation	Annual Contribution	1% Automatic Employing Services Contribution	Agency Match	Total Contribution	Account Balance
30	$50,000	$6,000	$500	$2,000	$8,500	$8,883
31	$51,000	$6,120	$510	$2,040	$8,670	$18,742
32	$52,020	$6,242	$520	$2,081	$8,843	$29,670
33	$53,060	$6,367	$531	$2,122	$9,020	$41,767
34	$54,122	$6,495	$541	$2,165	$9,201	$55,140
35	$55,204	$6,624	$552	$2,208	$9,385	$69,910
36	$56,308	$6,757	$563	$2,252	$9,572	$86,205
37	$57,434	$6,892	$574	$2,297	$9,764	$104,167
38	$58,583	$7,030	$586	$2,343	$9,959	$123,949
39	$59,755	$7,171	$598	$2,390	$10,158	$145,720
40	$60,950	$7,314	$609	$2,438	$10,361	$169,662
41	$62,169	$7,460	$622	$2,487	$10,569	$195,976
42	$63,412	$7,609	$634	$2,536	$10,780	$224,879
43	$64,680	$7,762	$647	$2,587	$10,996	$256,609
44	$65,974	$7,917	$660	$2,639	$11,216	$291,424
45	$67,293	$8,075	$673	$2,692	$11,440	$329,607
46	$68,639	$8,237	$686	$2,746	$11,669	$371,465
47	$70,012	$8,401	$700	$2,800	$11,902	$417,335
48	$71,412	$8,569	$714	$2,856	$12,140	$467,581
49	$72,841	$8,741	$728	$2,914	$12,383	$522,604
50	$74,297	$8,916	$743	$2,972	$12,631	$582,837
51	$75,783	$9,094	$758	$3,031	$12,883	$648,755
52	$77,299	$9,276	$773	$3,092	$13,141	$720,875
53	$78,845	$9,461	$788	$3,154	$13,404	$799,761
54	$80,422	$9,651	$804	$3,217	$13,672	$886,026
55	$82,030	$9,844	$820	$3,281	$13,945	$980,341
56	$83,671	$10,041	$837	$3,347	$14,224	$1,083,436
Total		**$212,066**	**$17,672**	**$70,689**	**$300,427**	**$1,083,436**

In this hypothetical TSP account scenario, the participant starts contributing at age 30 through age 56. Their annual compensation starts at $50,000 per year and increases 2% each year thereafter. In this hypothetical scenario, the participant contributes at 12% of compensation starting at age 30 and continues at the same contribution rate through age 56. The agency matching contributions is based on 4% of annual compensation. This hypothetical account scenario incorporates an annualized personal rate of return of 9%, net of TSP account expenses, for the age range from 30 through age 56 and participant and agency contributions for the year they are contributed have an annualized personal rate of return of 1/2 of the 9%. This hypothetical account scenario does not have loans or withdrawals taken from the account. Your own account may earn more or less than this example. This information is intended to be educational and is not tailored to the investment needs of any specific investor.

Source: Redhawk Wealth Advisors, Inc.

When running this option, an aggressive portfolio was used for the entire 26 years (ages 30-56) since they want to retire early and only had 26 years to save for retirement.

Because this person started contributing to the TSP at age 30 and they want to retire early at age 56, they don't have as many years to save for retirement. That is why they must start contributing 12% of their paycheck and investing in an aggressive portfolio for the entire 26 years before retirement.

As you can see in the chart above, this TSP participant would reach the millionaire status when they are age 56!

They would have to contribute $212,066, which is significantly more than if they wanted to retire later at age 65.

This example shows you that you can still reach the TSP millionaire status, but you must contribute more each paycheck because you want to retire early at age 56.

No matter your situation, you can become a TSP millionaire.

Epilogue – 5,000 more investment choices coming to the TSP – Now what?

In the summer of 2022, the TSP will offer both its civilian federal employee and uniformed services participants access to a mutual fund window. The window will allow TSP participants to allocate funds in their account to more than 5,000 investments. Additionally, the current funds will still be available under the plan. So, a simple menu of 5 investments will become not very simple (see the graphic below)!

Source: Redhawk Wealth Advisors, Inc.

According to the FRTIB, the agency that administers the TSP, the funds will include environmentally sustainable funds, which are commonly called ESG funds. ESG stands for Environmental, Social, and Governance and investors are increasingly applying these non-financial factors to identify material risks and growth opportunities.

ESG metrics are not commonly part of mandatory financial reporting, though companies are increasingly making disclosures in their annual report or in a standalone sustainability report. Numerous institutions, such as the Sustainability Accounting Standards Board (SASB), the Global Reporting Initiative (GRI), and the Task Force on Climate-related Financial Disclosures (TCFD) are working to form standards and define materiality to facilitate incorporation of these factors into the investment process.

Because ESG funds are gaining momentum in popularity, many financial services experts are predicting that there will be a surge in these investment options even outside of the TSP. There is a generational gap where, in some cases, younger generations care more about the impact of their investment than the return on their investment. As the wealth transfers to younger generations, ESG investing will gain even more momentum.

According to FRTIB spokesperson Kim Weaver[30], they have heard requests for greater investment flexibility in all the surveys they have done over the last eight years, and they commonly hear this same viewpoint through all their customer contact channels. TSP participants will not face any mandatory changes in the program in the summer of 2022 and the five main funds (the G, F, S, C, and I Funds), will remain. Participants who wish to incorporate a particular investment into their TSP account can do so through the mutual fund window.

In general, fees for ESG funds are slightly higher than index or passive funds and studies have shown that ESG investing can perform just as well, or even better, than other funds. In a recent study, the Morgan Stanley Institute for Sustainable Investing found that ESG funds performed better than non-ESG portfolios in 2020[31].

A mutual fund window is not a new concept inside of a retirement plan. Self-directed brokerage accounts (SDBA) or brokerage windows have been available in many retirement plans since the 1990s and roughly 40% of company 401(k) retirement plans offer one. Now let's look at some of the potential benefits and risks of using the mutual fund window in the TSP[32].

Potential benefits of a mutual fund window
There are several advantages in having a mutual fund window:

- *You have more investment choices.* You can choose from a wide range of investments that fit your situation. Simply put, you have more choice and control over the investments in your account. If we are called upon by TSP participants, we will employ our technology and tools to review the 5,000 investments available in the mutual fund window. We will utilize the same investment monitoring, selection, and replacement process that we use for high-net-worth individuals and endowments. The TSP portfolios will be created using the top scoring mutual funds based on its asset class, quality, momentum, and performance with the asset allocation to fit your risk score.

- *You can trade actively.* For those interested in active trading, the mutual fund window allows you to trade without worrying about the immediate tax impact, wash sale rules, or the difference between short-term and long-term capital gains.

- *You can use a financial advisor.* You don't have to go it alone! You can employ a financial advisor to manage your mutual fund window. This approach allows you to have a financial professional manage your account based on your risk tolerance and retirement objectives. The account management typically includes trading and rebalancing the account. A financial advisor will be able to use the portfolios constructed specifically for the TSP.

Potential risks of a mutual fund window

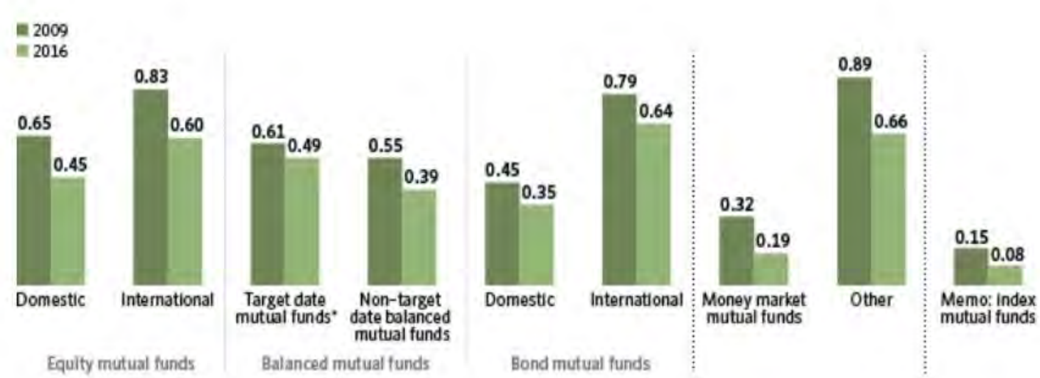
A mutual fund window also has some drawbacks:

- *You may be taking on more risk.* If you manage the mutual fund window by yourself, you are much more exposed to risks. You may be taking too much risk that the core TSP funds are designed to help mitigate. Taking on more risk in your largest investment account is not a prudent decision.

- *It can take a lot of time.* You must spend the necessary time to research the 5,000 funds and many people do not have the time or expertise to select, monitor and replace funds in their account efficiently. The TSP does not monitor the 5,000 funds that are available, and it is up to you.

- *There may be higher costs.* It's not clear yet whether the mutual fund window will charge any trading or usage fees. The mutual funds available will most likely have higher expense ratios than the current funds in the TSP. The investment expenses in the TSP, which are in the 0.05% to 0.07% range are undoubtedly the lowest cost in the industry. However, mutual funds available in the window will have a higher expense ratio (which means the total cost of the fund). Mutual fund costs in retirement plans have been coming down over the years and you can see that in the chart below, the average domestic equity fund (like the C Fund in the TSP) was 0.45% in 2016.

  Just because a mutual fund may have a higher expense than the current TSP funds, doesn't mean that it's a bad thing. You want to focus on the net return, meaning the return after expenses. For example, if the expense ratio of the C Fund is 0.05% and the annual return was 15%, the net return is 14.95%. Now if a mutual fund has an expense ratio of 0.45% and the annual return was 17%, the net return is 16.55%. It's critical that you don't just look at the cost of the fund, but you should focus on the net return.



Source: U.S. News and World Report

- *You may trade too often.* For your investments that are for retirement, taking a long-term time horizon is generally a better approach for individual investors. Frequent trading is short-term focused, and retirement is a long-term objective.

- *There might be too many choices.* Investors potentially expose themselves to much greater risk when they have a wide range of investment choices that have not been vetted. You want to make sure you have a well-diversified portfolio that is in line with your tolerance for risk and retirement objectives. Let's face it, most investors simply don't have the right tools or investment experience to review 5,000 funds.

So, what should you do?
If you like to constantly educate yourself about individual securities and the wider market, and if you don't mind checking your account more often, then the TSP mutual fund window may be for you. At the end of the day, it is about knowing yourself and what kind of investor you are.

If you don't have the time, resources, energy, and knowledge to utilize the TSP mutual fund window, but still want more exposure to a wider range of investment options and a broader sense of control, hiring a financial advisor to manage your account using the mutual fund window might be the best choice for you.

A great way to think about if you should consider hiring a financial advisor is to consider the three T's: time, technique, and temperament. Reflecting on the "three T's" means determining if you have the following[33]:

1. **Time:** Do you have the time, patience, and interest in educating yourself about investments, the market, and personal finance topics?

2. **Technique:** Do you have the technique, or technical knowledge, to understand how to avoid mistakes and leverage the best financial strategies?

3. **Temperament:** Do you have the temperament to make wise financial decisions without outside advice or counsel? Can you make investing decisions without letting your emotions drive your decision making?

If you feel you are lacking in the three T's, then you should absolutely consider hiring a financial advisor to manage your TSP account. However, if you have an interest in the topic of personal finance and you have the time to invest in researching your financial decisions and you feel confident in your technical understanding, you might very well be fine without seeking outside help. The main goal is to make sure you are handling your TSP account responsibly.

Definitions

Accredited Investment Fiduciary (AIF®) is a professional certification that demonstrates an advisor or other person serving as an investment fiduciary has met certain requirements to earn and maintain the credential. The purpose of the AIF® Designation is to assure that those responsible for managing or advising on investor assets have a fundamental understanding of the principles of fiduciary duty, the standards of conduct for acting as a fiduciary, and a process for carrying out fiduciary responsibility. Fi360 is accredited by the American National Standards Institute (ANSI) for the AIF® Designation, making the designation part of an elite group of accredited designations recognized by FINRA.

Asset Category is a grouping of investments that exhibit similar characteristics and are subject to the same laws and regulations. The main asset categories include equities (stocks), Fixed Income (bonds), Cash and cash equivalents (CDs), and Real Estate and Commodities.

Asset Class is a further breakdown of the investments that are in an asset category. For example, equities can be further segmented into U.S. equities, foreign equities, and emerging markets equities. U.S equities can be further grouped by market capitalization, such as small-cap growth, small-cap blend, and small-cap value. It's used to help investors make meaningful comparisons between funds.

Basis Point (bps) is one one-hundredth (1/100 or 0.01) of 1%.

Bear Market is when a market experiences prolonged price declines. It typically describes a condition in which securities prices fall 20% or more from recent highs amid widespread pessimism and negative investor sentiment. Bear markets may be contrasted with upward-trending bull markets.

Behavioral Finance is the study of the influence of psychology on the behavior of investors or financial analysts. It also includes the subsequent effects on the markets. It focuses on the fact that investors are not always rational, have limits to their self-control, and are influenced by their own biases.

Beta measures the sensitivity of an investment to the movement of its benchmark. A beta higher than 1.0 indicates the investment has been more volatile than the benchmark and a beta of less than 1.0 indicates that the investment has been less volatile than the benchmark.

Bloomberg Barclays U.S. Aggregate Bond Index is an unmanaged index that measures the performance of the investment grade universe of bonds issued in the United States. The index includes institutionally traded U.S. Treasury, government sponsored, mortgage and corporate securities.

Broker is a professional who executes buy and sell orders for stocks and other securities on behalf of clients. A broker may also be known as a registered representative. A broker is usually associated with a broker-dealer and handle transactions for retail and institutional customers alike. A broker often receives commissions for their services.

Broker-dealer is a firm in the business of buying and selling securities for its own account or on behalf of its customers. A broker-dealer is a buyer and seller of securities, and they are also distributors of other investment products. As the name implies, they perform a dual role in carrying out their responsibilities. As a dealer, they act on behalf of the brokerage firm, initiating transactions for the firm's own account. As a broker, they handle transactions, buying and selling securities on behalf of their clients.

Bull Market is a market that is on the rise and where the economy is sound; while a bear market exists in an economy that is receding, where most stocks are declining in value. A bull market is a period in financial markets when the price of an asset or security rises continuously. The commonly accepted definition of a bull market is when stock prices rise by 20% after two declines of 20% each.

C Fund is a fund in the TSP that is managed to fully replicate the Standard and Poor's 500 (S&P 500) Index. The earnings consist primarily of dividend income and gains (or losses) in the price of stocks. The C Fund is a passively managed fund that remains invested according to its indexed investment strategy regardless of stock market movements or general economic conditions. Your investment in the C Fund is subject to market risk because the prices of the stocks in the S&P 500 Index rise and fall. By investing in the C Fund, you are also exposed to inflation risk, meaning your C Fund investment may not grow enough to offset inflation. While investment in the C Fund carries risk, it also offers the opportunity to experience gains from equity ownership of large and mid-sized U.S. company stocks.

Chartered Financial Analyst (CFA) is considered the most exclusive and most difficult title to achieve, the CFA designation requires multiple monitored exams, working as an investment professional for a minimum of four years, and committing to a code of ethics and standards of professional conduct. This title is bestowed by the CFA Institute, founded in 1959. However, it is unlikely that an individual investor would deal with a CFA. CFAs are generally research analysts employed by investment banks, mutual fund companies, and securities firms. They typically specialize in an industry and the companies operating within that industry.

Certified Financial Planner (CFP) is a designation conferred by the Certified Financial Planner Board of Standards, Inc., has become increasingly popular in recent years, particularly by those who provide fee-based advisory services to individuals or sell financial products which are frequently coordinated with other components of personal finance. Certification is rigorous and it involves a lengthy education requirement and follows the successful passage of multiple exams completed over a two-day period dealing with personal finance subjects, including investments, insurance, and estate planning. Candidates are required to possess a bachelor's degree and three years of relevant experience and must adhere to a code of ethics.

Chicago Board Options Exchange (CBOE) Volatility Index (VIX) is a measure of market expectations of near-term volatility as conveyed by S&P 500 stock index option prices.

Compounding is the ability of an asset to generate earnings, which are then reinvested or remain invested with the goal of generating their own earnings. In other words, compounding refers to generating earnings from previous earnings.

Correlation is a statistical measure of the relationship between two sets of data. When asset prices move together, they are described as positively correlated; when they move opposite to each other, the correlation is described as negative or inverse. If price movements have no relationship to each other, they are described as uncorrelated.

Cyclically Adjusted Price-to-Earnings Ratio (CAPE) is defined as price divided by the average of ten years of earnings, adjusted for inflation.

Drawdown is a peak-to-trough decline during a specific period for an investment, trading account, or fund. Drawdowns are important for measuring the historical risk of different investments, comparing fund performance, or monitoring personal trading performance.

Expected Return is the amount of profit or loss an investor can anticipate receiving on an investment. An expected return is calculated by multiplying potential outcomes by the odds of them occurring and then totaling these results.

Expense Ratio measures how much of a fund's assets are used for administrative and other operating expenses. An expense ratio is determined by dividing a fund's operating expenses by the average dollar value of its assets under management (AUM).

F Fund is a fund in the TSP that is managed to track the Bloomberg Barclays U.S. Aggregate Bond Index. This broad index includes U.S. Government, mortgage-backed, corporate, and foreign government (issued in the U.S.) sectors of the U.S. bond market. The earnings consist of interest income on the securities and gains (or losses) in the value of the securities. The F Fund uses an indexing approach to investing. In other words, it is a passively managed fund that remains invested according to its investment strategy regardless of conditions in the bond market or the economy. Because the F Fund returns move up and down with the returns in the bond market, the F Fund investment is subject to market risk. For example, when interest rates rise, bond prices (and thus, the returns of the index and the F Fund) fall. Conversely, in an environment of falling interest rates, bond prices, as well as the index and F Fund returns, rise. The F Fund is exposed to credit (default) risk, or the possibility that principal and interest payments on the bonds that comprise the index will not be paid. The F Fund is subject to inflation risk, meaning the F Fund investment may not grow enough to offset the reduction in purchasing power that results from inflation. The F Fund investment is also exposed to prepayment risk, which is the probability that if interest rates fall, bonds that are represented in the index will be paid back early thus forcing lenders to reinvest at lower rates.

Federal Employee Retirement System (FERS) is the retirement plan for U.S. civilian federal government employees. The FERS retirement plan provides benefits from three different sources: a Basic Benefit Plan, Social Security (SS), and the Thrift Savings Plan (TSP). The Basic Benefit and Social Security parts of FERS requires the employee to pay their share each pay period and the SS and TSP pieces are portable if they leave their government employer.

Federal Funds Rate (fed funds rate, fed funds target rate, or intended federal funds rate) is a target interest rate that is set by the FOMC for implementing U.S. monetary policies. It is the interest rate that banks with excess reserves at a U.S. Federal Reserve district bank charge other banks that need overnight loans. The Federal Reserve's dot plot shows the projections of the 12 members of the Federal Open Market Committee (FOMC) on where they think the fed funds rate should be at the end of the various calendar years shown, as well as in the long run—the peak for the fed funds rate after the Fed has finished tightening or "normalizing" policy from its current levels. The dot plot is published after each Fed meeting.

Federal Open Market Committee (FOMC) is a policy-making body of the Federal Reserve System responsible for the formulation of a policy designed to promote economic growth, full employment, stable prices and a sustainable pattern of international trade and payments. The Fed's neutral rate is the rate that is consistent full employment and capacity utilization and stable prices. It is also called the terminal rate or neutral interest rate.

Federal Reserve Board (Fed) is responsible for the formulation of U.S. policies designed to promote economic growth, full employment, stable prices and a sustainable pattern of international trade and payments.

Federal Retirement Thrift Investment Board administers the Thrift Savings Plan (TSP), a tax-deferred defined contribution plan like private sector 401(k) plans which provides Federal employees the opportunity to save for additional retirement security.

Fiduciary is a person who holds a legal or ethical relationship of trust with you. A fiduciary prudently takes care of your money or assets. A fiduciary may be a financial advisor, a corporate trust company, or the trust department of a bank. When a financial advisor has a fiduciary duty to you, they must act in a way that will financially benefit you. The financial advisor who has a fiduciary duty is called the fiduciary, and you to whom the duty is owed is called the principal or the beneficiary.

Fiduciary Standard refers to a standard that an investment advisor representative (IAR) is bound to and is regulated by the Securities and Exchange Commission (SEC) or state securities regulators, both of which hold advisers to a fiduciary standard that requires them to put their client's interests above their own. The act is specific in defining what a fiduciary means, and it stipulates that an IAR must place their interests below that of their clients. It consists of a duty of loyalty and care.

Financial Industry Regulatory Authority (FINRA) is an independent regulator securities firms doing business in the United States. Securities are financial instruments, such as stocks or bonds, that can be traded freely on the open market.

Financial Plan is a comprehensive evaluation of an individual's current pay and future financial state by using current known variables to predict future income, asset values and withdrawal plans. This often includes a budget which organizes an individual's finances and sometimes includes a series of steps or specific goals for spending and saving in the future. This plan allocates future income to various types of expenses, such as rent or utilities, and reserves some income for short-term and long-term savings. A financial plan is sometimes referred to as an investment plan, but in personal finance, a financial plan can focus on other specific areas such as risk management, estates, college, or retirement.

G Fund is a fund in the TSP that invests exclusively in a nonmarketable short-term U.S. Treasury security that is specially issued to the TSP. The earnings consist entirely of interest income on the security. The G Fund's investment objective is to produce a rate of return that is higher than inflation while avoiding exposure to credit (default) risk and market price fluctuations. The G Fund is subject to inflation risk, or the possibility that the G Fund investment will not grow enough to offset the reduction in purchasing power that results from inflation.

Glide Path refers to a formula that defines the asset allocation mix of a target-date fund, based on the number of years to the target date. The glide path creates an asset allocation that typically becomes more conservative (i.e., includes more fixed-income assets and fewer equities) as a fund gets closer to the target date.

Global Investment Performance Standards (GIPS) are a set of voluntary standards used by investment managers throughout the world to ensure the full disclosure and fair representation of their investment performance.

Gross Domestic Product (GDP) is an economic statistic which measures the market value of all final goods and services produced within a country in each period.

I Fund is a fund in the TSP that invests in a stock index fund that fully replicates the MSCI EAFE (Europe, Australasia, Far East) Index. The earnings consist of gains (or losses) in the price of stocks, dividend income, and change in the relative value of currencies. The I Fund uses an indexing approach to investing. In other words, it is a passively managed fund that remains invested according to its investment strategy regardless of stock market movements or general economic conditions. The I Fund is subject to market risk because the MSCI EAFE Index returns will move up and down in response to overall economic conditions. Because of its exposure to currency risk, the EAFE Index (and the I Fund returns) will rise or fall as the value of the U.S. dollar decreases or increases relative to the value of the currencies of the countries represented in the EAFE index. The I Fund is also exposed to inflation risk, meaning the I Fund investment may not grow enough to offset the reduction in purchasing power that results from inflation.

Index Option is a contract that gives the buyer the right, but not the obligation, to buy or sell an underlying index at a strike price on an expiration date. Index options give investors the opportunity to trade on entire markets or specific segments of a market with a single transaction.

Inflation is the decline of purchasing power of a given currency over time. It is the rate at which the value of a currency is falling and, consequently, the general level of prices for goods and services is rising.

Inertia is the condition where investors are comfortable doing nothing is a well-documented phenomenon by behavioral finance experts. When investors worry about making the wrong decision and are faced with too many choices, they do not know what to do. They dislike tasks that entail making multiple decisions.

Inverted Yield Curve refers to a market condition when yields for longer maturity bonds have yields which are lower than shorter-maturity issues.

Investment Advisers Act of 1940 is a law that regulates investment advisers. With certain exceptions, this Act requires that firms or sole practitioners compensated for advising others about securities investments must register with the SEC and conform to regulations designed to protect investors.

Investment Advisor Representative (IAR) is a financial professional who works for investment advisory companies. The primary responsibility of an IAR is to provide investment-related advice. According to regulations, IARs can only offer advice on topics on which they have passed the appropriate examinations. An IAR must register with a Registered Investment Advisor (RIA) firm. IARs receive compensation by charging fees.

Investment Policy Statement (IPS) is a document drafted between a financial advisor and their client that outlines general rules for the investments manager. This statement provides the general investment goals and objectives of a client and describes the strategies that the manager should employ to meet these objectives. Specific information on matters such as asset allocation, risk tolerance, and liquidity requirements may be included.

L Income Fund is a fund in the TSP that is managed to achieve a low level of growth with a high emphasis on preservation of assets. Unlike the other four L Funds, the L Income Fund's asset allocation does not change quarterly. However, like the other funds, it is rebalanced daily to maintain its target investment mix.

Lifecycle Funds are target date funds in the TSP that are managed to a glide path for a specific retirement date (i.e., 2030, 2050, 2060, etc.). Each lifecycle fund has its own objective to achieve a certain level of growth and income. The lifecycle funds use the core funds available in the TSP (G, F, C, S, and I Funds) and each target date has a different asset allocation based on the investment objective of the fund. The lifecycle funds are re-balanced quarterly. When a specific lifecycle fund reaches its target year, it will roll into the L Income Fund automatically.

Managed Account refers to a customized investment account managed by a professional investment manager on behalf of an investor.

Market Capitalization (market cap) is the total dollar market value of all company's (indexes) outstanding shares; it is calculated by multiplying a company's (indexes) shares outstanding by the current market price of one share.

MSCI Emerging Markets (EM) Index is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets.

MSCI World Index is an unmanaged index of common stocks of company's representative of the market structure of 22 developed market countries in North America, Europe, and the Asia/Pacific Region. The index is calculated without dividends, with net or with gross dividends reinvested, in both U.S. dollars and local currencies.

Opportunity Cost represent the potential benefits an investor misses out on when choosing one alternative over another.

Preservation of Capital is a strategy for protecting the money an investor has available to invest.

Price-to-Book (P/B) Ratio is a stock's price divided by the stock's per share book value.

Price-to-Earnings (P/E) Ratio is a stock's price divided by its earnings per share.

Real GDP is a nation's total output of goods and services in constant dollar, or inflation-adjusted terms.

Real Yields are calculated by adjusting stated yields to compensate for inflation expectations over the time during which the yields are expected to be paid.

Registered Investment Advisor (RIA) is a firm who advises high-net-worth individuals on investments and manages their portfolios. RIAs have a fiduciary duty to their clients, which means they have a fundamental obligation to provide investment advice that always acts in their clients' best interests. RIAs are required to register either with the Securities and Exchange Commission (SEC) or state securities administrators.

Return on Equity (ROE) is the amount of net income returned as a percentage of shareholders' equity. Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested. ROE is expressed as a percentage and calculated as: Return on Equity = Net Income/Shareholders' Equity.

Risk Tolerance is the degree of variability in investment returns that an investor is willing to withstand in their financial planning.

S&P 500 Index is an unmanaged index of 500 stocks that is generally representative of the performance of larger companies in the U.S.

Securities and Exchange Commission (SEC) is a U.S. Government agency, with the purpose of protecting investors from dangerous or illegal financial practices or fraud, by requiring full and accurate financial disclosure by companies offering stocks, bonds, mutual funds, and other securities to the public.

Sequence of Returns Risk is the risk that comes from the order in which your investment returns occur. To put it another way, sequence of return risk is the risk that market declines in the early years of retirement, paired with ongoing withdrawals, could significantly reduce the longevity of a portfolio.

Thrift Savings Plan (TSP) is a type of retirement investment program open to federal employees and members of the uniformed services, including the Ready Reserve. The TSP is a defined-contribution plan that offers federal employees many of the same benefits that are available to workers in the private sector. It closely resembles a 401(k) plan.

VIX stands for volatility index and is a blended implied volatility value calculated using specific S&P 500 Index option contracts and is used as a sentiment indicator. An index option contract gives the buyer the right, but not the obligation, to buy or sell an underlying index at a strike price on an expiration date. Index option contracts give investors the opportunity to trade on entire markets or specific segments of a market with a single transaction. Therefore, a climbing VIX reflects bearish conditions in the S&P 500 and typically the markets.

Volatility refers to the amount of uncertainty or risk related to the size of changes in a security's value. A higher volatility means that a security's value can potentially be spread out over a larger range of values.

Yield Curve is the graphical depiction of the relationship between the yield on bonds of the same credit quality but different maturities.

Have Questions?

Contact Us:

Elizabeth Inman

Senior Federal Benefit Coordinator

Phone: (833) 693-3388

Email: elizabeth@febcnow.com

www.federalbenefitcoordinators.com

Federal Employee Employment Coordinators

500 S Broadway St. Skiatook, OK 74070

Acknowledgements

1. “Good News: There are 98,879 federal TSP millionaires! Bad News: Too many people know it.” Mike Causey, Federal News Network, August 12, 2021. https://federalnewsnetwork.com/mike-causey-federal-report/2021/08/good-news-there-are-98879-federal-tsp-millionaires-bad-news-too-many-people-know-it/

2. “Annual Report of the Thrift Savings Plan Required by §105 of the TSP Enhancement Act of 2009, Federal Retirement Thrift Investment Board (FRTIB) June 30, 2020.” https://www.frtib.gov/ReadingRoom/Congress/TSP-Annual-Report_2019.pdf

3. “TSP satisfaction remains high, but participants have ideas on how it can improve.” Nicole Ogrysko, Federal News Network, August 27, 2021. https://federalnewsnetwork.com/tsp/2021/08/tsp-satisfaction-remains-high-but-participants-have-ideas-on-how-it-can-improve/

4. “What is the current TSP G Fund interest rate?” TSP Folio, 2021. https://www.tspfolio.com/tspgfundinterestrate

5. “Current U.S. Inflation Rates: 2000 – 2021.” U.S. Inflation Calculator, CoinNews Media Group, LLC., https://www.usinflationcalculator.com/inflation/current-inflation-rates/

6. “Treasury Suspends Investments into TSP’s G Fund, and More.” Erich Wagner, Government Executive, August 4, 2021. https://www.govexec.com/pay-benefits/2021/08/treasury-suspends-investments-tsps-g-fund-and-more/184298/

7. “Growing Your TSP: Time to time the market?” Mike Causey, Federal News Network, June 17, 2020. https://federalnewsnetwork.com/mike-causey-federal-report/2020/06/growing-your-tsp-time-to-time-the-market/

8. “The Downside of Investing in the TSPs Lifecycle Funds.” Dallen Haws, Government Executive, November 16, 2020. https://www.govexec.com/pay-benefits/2020/11/downside-investing-tsps-lifecycle-funds/170074/

9. “What Changes to the Thrift Savings Plan Means for Investors.” Aron Szapiro, Morningstar, May 16, 2019. https://www.morningstar.com/articles/929540/what-changes-to-the-thrift-savings-plan-mean-for-investors

10. “Understanding Lifecycle Funds.” Adam Levy, The Motley Fool, July 23, 2021. https://www.fool.com/retirement/strategies/life-cycle-funds/

11. “Drawbacks of TSP Lifecycle Funds.” Advance Capital Management, May 27, 2020. http://blog.acadviser.com/drawbacks-of-tsp-lifecycle-funds

12. Robert W. Baird & Co. Incorporated (2016). “Sequence of Returns Risk.”

13. “Thrift Savings Plan Fund Information.” March 2021. https://www.tsp.gov/publications/tsplf14.pdf

14. “L Income” Thrift Savings Plan. https://www.tsp.gov/funds-lifecycle/l-income/

15. “TSP Rates of Returns as of July 31, 2021” https://www.tsp.gov/fund-performance/

16. Russel Investments “Why Advisors Have Never Been So Valuable, 2017 Value of an Advisor Study” First used: September 2017.

17. Riskalyze, “Empowering the world to invest fearlessly.” When financial advisors aren’t afraid to talk about risk, investors aren’t afraid to make the right decisions. https://www.riskalyze.com.

18. Riskalyze, “How is the Risk Number Calculated.” Last updated on May 9, 2019. https://kb.riskalyze.com/hc/en-us/articles/115009161028-How-is-the-Risk-Number-Calculated-

19. “The Impact of Managed Accounts on Participants Savings and Investment Decisions.” David Blanchett, Morningstar Resource, January 22, 2019. https://www.morningstar.com/content/dam/marketing/shared/pdfs/workplace/wp_Impact_of_Managed_Accounts.pdf?utm_source=eloqua&utm_medium=email&utm_campaign=&utm_content=15637

20. “The Impact of the Default Investment Decision on Participant Deferral Rates: Managed Accounts vs. Target-Date Funds.” David Blanchett, Daniel Bruns, and Nathan Voris, Morningstar Research, October 17, 2016. https://www.morningstar.com/content/dam/marketing/shared/research/foundational/771153-ImpactDefaultDeferral.pdf

21. “8 Reasons to Never Borrow from Your 401k” Lisa Smith, Investopedia, May 30, 2021. https://www.investopedia.com/articles/retirement/06/eightreasons401k.asp

22. “Thinking of taking money out of a 401k?” Fidelity Viewpoints, December 30, 2020. https://www.fidelity.com/viewpoints/financial-basics/taking-money-from-401k

23. TSP Folio, Terms of Service, December 24, 2018. https://www.tspfolio.com/tos

24. “Hypothetical Performance Data [Investment] Law and Legal Document,” USLegal.com, https://definitions.uslegal.com/h/hypothetical-performance-data-investment/

25. “Pitfalls and Best Practices for Presenting Third-Party Performance,” ACA Group, April 6, 2018. https://www.acaglobal.com/insights/faq-pitfalls-and-best-practices-presenting-third-party-performance

26. “What are Global Investment Performance Standards (GIPS)?” James Chen, Investopedia, December 15, 2020. https://www.investopedia.com/terms/g/gips.asp

27. “Freedom to Soar, Your Guide to a Better Financial Outcome.” Rick Keast, Self Published, 2020.

28. “The Real Cost of Volatility.” Franklin Templeton, 08/20/2020. https://www.franklintempleton.com/forms-literature/download/RRET-FLRCV.

29. Since 1994, DALBAR's Quantitative Analysis of Investor Behavior ("QAIB") has measured the effects of investor decisions to buy, sell and switch into and out of mutual funds over short and long-term time frames. These effects are measured from the perspective of the investor and do not represent the performance of the investments themselves. The results consistently show that the average investor earns less – in many cases, much less – than mutual fund performance reports would suggest. The 25th Annual QAIB examines real investor returns in nearly 30 different categories of investors. The analysis covers the 20-year period to December 31, 2018, which encompasses the aftermath of the crash of 1987, the drop at the turn of the millennium, the crash of 2008, plus recovery periods leading up to the most recent bull market. https://www.dalbar.com/

30. "Federal workers to gain access to ESG in retirement portfolios." Keith Lewis, Roll Call, July 15, 2021. https://www.rollcall.com/2021/07/15/federal-workers-to-gain-access-to-esg-in-retirement-portfolios/

31. "Expect More ESG Investment Options Next Year." Amanda Umpierrez, Planadviser, July 16, 2021.

32. "Pros and Cons of 401(k) Brokerage Options." Matt Whittaker, U.S. News and World Report, May 26, 2021. https://money.usnews.com/investing/investing-advice/articles/pros-and-cons-of-401-k-brokerage-options

33. "Should you hire a financial advisor? Ask yourself these 4 questions first." Anna Hecht, CNBC, January 10, 2020. https://www.cnbc.com/2020/01/10/ask-yourself-4-questions-before-hiring-a-financial-advisor.html

About the Author

Rick Keast is the President and Chief Compliance Officer of Redhawk Wealth Advisors, Inc. Redhawk is an SEC registered investment advisor located in Minneapolis, Minnesota. Mr. Keast is responsible for the operations and overall performance of the firm, as well as oversees the regulatory and compliance functions and the investment committee for the firm. He has over 30 years of experience in the financial services industry and has worked with financial advisors throughout the country to help them build their practices.

Mr. Keast has a proven track record in the financial services industry for developing revenue-producing relationships and delivering key customer solutions. He developed the first 401(k) offering with exchange traded funds in 2005 working with Capital One ShareBuilder. He has also served as the lead consultant working with major Fortune 500 firms such as PepsiCo, Frito-Lay, Pizza Hut, Taco Bell, Continental Airlines, Merrill Lynch, State Street, CONAGRA, and Textron. Prior to joining Redhawk, Mr. Keast held various management positions with ExpertPlan, PAi, Merrill Lynch, KPMG Consulting, and William M. Mercer.

Mr. Keast earned his bachelor’s degree from Northern Illinois University and an MBA from Lake Forest Graduate School of Management. He also holds the Accredited Investment Fiduciary (“AIF®”) designation from Fi360. Mr. Keast is the author of the book “Freedom to Soar, Your Guide to a Better Financial Outcome” which was published in 2020.