Federal Employees’ Retirement System: The Role of the Thrift Savings Plan

Katelin P. Isaacs
Congressional Research Service
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Abstract

[Excerpt] The Thrift Savings Plan plays a pivotal role in helping federal workers achieve adequate retirement income. Employees enrolled in the FERS who do not make voluntary contributions to the TSP, and thus receive only the 1% agency automatic contribution, will be able to replace only 1% to 3% of final annual salary from the TSP at retirement. Most workers in the lower and middle ranges of the federal salary scale will be able to achieve the 70% salary replacement recommended by many pension analysts from the benefits paid by Social Security and the FERS basic retirement annuity, but this is not so for higher-wage federal workers. Federal employees at all income levels can significantly boost their retirement income by contributing to the TSP, and such contributions are essential in order for those in the upper third of the federal pay scale to achieve a level of income that will allow them to maintain their pre-retirement standard of living.

Keywords
Federal Employees’ Retirement System, FERS, Thrift Savings Plan, retirement, federal employees

Comments
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Federal Employees’ Retirement System: The Role of the Thrift Savings Plan

Katelin P. Isaacs
Analyst in Income Security

March 8, 2013
Summary

Federal employees participate in one of two retirement systems. The Civil Service Retirement System (CSRS) was established in 1920 and covers only employees hired before 1984. Participants in the CSRS do not pay Social Security payroll taxes and they do not earn Social Security benefits. For a worker retiring after 30 years of federal service, a CSRS annuity will be equal to 56.25% of the average of his or her highest three consecutive years of basic pay.

The Social Security Amendments of 1983 (P.L. 98-21) required federal employees hired after 1983 to participate in Social Security. Because the CSRS was not designed to coordinate with Social Security, Congress directed the development of a new retirement plan for federal workers hired after 1983. The result was the Federal Employees’ Retirement System (FERS) Act of 1986 (P.L. 99-335). The FERS has three elements: (1) Social Security, (2) the FERS basic retirement annuity and FERS supplement, and (3) the Thrift Savings Plan (TSP).

The amount of the FERS basic retirement annuity is determined by three factors: (1) the salary base, (2) the accrual rate, and (3) years of service. The salary base is the average of the worker’s highest three consecutive years of pay. Under FERS, the benefit accrual rate is 1.0% per year of service, or 1.1% for workers retiring at the age of 62 or later with 20 or more years of service. A worker with 30 years of service retiring at the age of 62 will receive a FERS pension equal to 33% of the average of his or her highest three consecutive years of pay, or about 32% of final annual salary.

The TSP is a defined contribution retirement plan similar to the 401(k) plans provided by many employers in the private sector. The income that a retired worker receives from the TSP will depend on the balance in his or her account. In 2013, employees covered by FERS or CSRS can contribute up to $17,500 to the TSP. Employees aged 50 or older can contribute an additional $5,500. Contributions of up to 5% of pay made by workers under FERS are matched by the federal government. Workers covered by CSRS can contribute to the TSP, but they receive no matching contributions.

The TSP is a key element of the FERS, especially for workers at the upper ranges of the federal pay scale. The Social Security benefit formula is designed to replace a greater share of income for low-wage workers than for high-wage workers. The FERS basic annuity will replace about 32% of final salary for an employee retiring at the age of 62 with 30 years of service. Higher-wage federal workers need to contribute a greater percentage of pay to the TSP to reach the same level of income replacement as lower-paid workers can achieve from just the FERS retirement annuity and Social Security. At an annual rate of return of 6.0%, income from the TSP can replace about 33% of final pay for a federal employee who contributes 10% of pay over 30 years.
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Introduction

Federal employees participate in one of two retirement systems. The Civil Service Retirement System (CSRS) was established in 1920 and covers only employees hired before 1984. Participants in the CSRS do not pay Social Security payroll taxes and they do not earn Social Security benefits. For a worker retiring after 30 years of federal service, a CSRS annuity will be equal to 56.25% of the average of his or her highest three consecutive years of basic pay.


The FERS consists of three elements:

- Social Security,
- the FERS basic retirement annuity and the FERS supplement, and
- the Thrift Savings Plan (TSP).

All federal employees initially hired into federal employment on or after January 1, 1984, are enrolled in the FERS, as are employees who voluntarily switched from CSRS to FERS during “open seasons” held in 1987 and 1998. Of 2,831,000 federal civilian and Postal Service employees enrolled in these federal retirement plans as of September 30, 2010, 2,458,000 (87%) were participating in the FERS and 373,000 (13%) were under the CSRS.

The FERS Basic Retirement Annuity

Retirement Age and Service Requirements

Federal employees are fully vested in the FERS basic retirement annuity after five years of service. The earliest age at which a worker can retire under FERS was 55 for workers born before 1948. The minimum retirement age (MRA) under FERS began to increase in 2003 for workers born in 1948, and it eventually will reach the age of 57 for those born in 1970 or later (see Table 1). In 2012, a worker who has completed at least 30 years of service can retire with an immediate, unreduced annuity at the age of 56. An employee with 20 or more years of service can retire with an immediate, unreduced annuity at the age of 60, and an employee with at least five years of service can retire with an immediate annuity at the age of 62.

---

1 Relatively few employees who were covered by CSRS chose to switch to FERS. Only about 5% of eligible employees switched in 1987, and fewer than 2% switched in 1998.


3 Members of Congress and congressional staff, federal law enforcement officers, firefighters, air traffic controllers, and nuclear materials couriers can retire with an immediate, unreduced annuity at the age of 50 after 20 years of service (continued...)
Table 1. Minimum Retirement Age under FERS

<table>
<thead>
<tr>
<th>Year of Birth</th>
<th>Minimum Retirement Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>1947 or earlier</td>
<td>55 years</td>
</tr>
<tr>
<td>1948</td>
<td>55 years, 2 months</td>
</tr>
<tr>
<td>1949</td>
<td>55 years, 4 months</td>
</tr>
<tr>
<td>1950</td>
<td>55 years, 6 months</td>
</tr>
<tr>
<td>1951</td>
<td>55 years, 8 months</td>
</tr>
<tr>
<td>1952</td>
<td>55 years, 10 months</td>
</tr>
<tr>
<td>1953 to 1964</td>
<td>56 years</td>
</tr>
<tr>
<td>1965</td>
<td>56 years, 2 months</td>
</tr>
<tr>
<td>1966</td>
<td>56 years, 4 months</td>
</tr>
<tr>
<td>1967</td>
<td>56 years, 6 months</td>
</tr>
<tr>
<td>1968</td>
<td>56 years, 8 months</td>
</tr>
<tr>
<td>1969</td>
<td>56 years, 10 months</td>
</tr>
<tr>
<td>1970 or later</td>
<td>57 years</td>
</tr>
</tbody>
</table>

Source: 5 U.S.C. §8412

Under FERS, employees (or former employees) who have completed 10 or more years of government service can elect to receive a reduced retirement annuity at the minimum retirement age. For those who choose this option, their annuities are permanently reduced by 5% multiplied by the number of years between 62 and the individual’s age at the time the annuity begins. For example, an employee who retires at 56 years old with fewer than 30 years of service would have his or her annuity reduced by 30% below the amount that would have been paid if the individual were aged 62 or older at retirement.

Of the 39,337 federal employees covered by CSRS who retired under normal, voluntary rules in FY2011, 42% were between the ages of 55 and 59. They had an average of 34.8 years of federal service.³ Thirty percent of federal workers who took normal retirement under CSRS in FY2011 were aged 62 or older. The average age of all federal workers covered by CSRS who retired in FY2010 under normal, voluntary retirements was 60.7 years. Their average length of federal service was 35.5 years. Because relatively few employees hired before 1984 elected to switch to FERS, individuals who have been retiring under FERS have tended to be those who joined or rejoined the federal work force relatively late in their careers. In FY2011, 27,006 federal employees retired with immediate annuities under FERS. Their average age was 63.5 years, and their average length of service in the federal government was 20.9 years.⁵ The average length of service for workers retiring under FERS will rise over time as the proportion of federal employees who spent their entire careers under FERS continues to increase.

(...continued)

or at any age after 25 years of service.

³ “Normal, voluntary” retirements exclude those occurring due to disability, involuntary and voluntary retirements resulting from reductions in force, and mandatory early retirement for federal law-enforcement officers, firefighters, and air traffic controllers.

Calculating the FERS Basic Retirement Annuity

The FERS basic retirement annuity is a defined benefit (DB) pension. The amount of the pension benefit is determined by multiplying three factors—the employee’s number of years of service, the annual benefit accrual rate, and the salary base—as is shown in the following formula:

\[
pension \text{ amount} = \text{years of service} \times \text{accrual rate} \times \text{salary base}
\]

Salary Base

In both CSRS and FERS, the salary base is the average of the employee’s three highest consecutive years of basic pay, sometimes called “high-three pay.”

Accrual Rate

The annual benefit accrual rate is the percentage of the salary base that a worker earns in pension benefits for each year of service. Under FERS, retirement benefits accrue at the rate of 1.0% per year. A worker with 30 years of service will have accrued a pension benefit equal to 30% of the FERS salary base. Employees with 20 or more years of federal service who retire at the age of 62 or later are credited with a benefit accrual rate of 1.1% for each year of service. For example, a worker under FERS who retires at 61 years old with 29 years of service would receive a FERS annuity equal to 29% of his or her high-three average pay. Delaying retirement by one year would increase the annuity to 33% of high-three average pay because the benefit accrual rate would be 1.1% for each year of service rather than 1.0% per year of service.

Under CSRS, employees accrue pension benefits at rates that increase with length of service. The CSRS benefit accrual rate is 1.5% for each of the first 5 years of service; 1.75% for the 6th through 10th years of service; and 2.0% for each year of service after the 10th year. This results in a retirement annuity equal to 56.25% of high-three average pay for a worker who retires with 30 years of service.

Social Security, and the “FERS Supplement”

Congress intended the FERS to be a complete retirement package consisting of Social Security, the FERS annuity, and the Thrift Savings Plan. Because Social Security retirement benefits cannot begin before the age of 62, Congress included in the FERS a temporary supplement for federal workers who retire before the age of 62. The FERS supplement is equal to the portion of the Social Security benefit to which the worker will be entitled at the age of 62 that is attributable

---

6 This calculation is based on nominal (current) dollars rather than indexed (constant) dollars.
7 Under FERS, Members of Congress first elected prior to 2013, congressional staff first hired prior to 2013, and certain public safety workers accrue benefits at the rate of 1.7% per year for the first 20 years of service and 1.0% per year for service over 20 years. These rates yield a pension equal to 34% of the FERS salary base after 20 years of service and 44% after 30 years of service, provided that both the age and length of service requirements for retirement with a full FERS annuity have been met.
8 Under CSRS, initial benefits are capped at 80% of high-3 average salary. Members of Congress and congressional staff accrue benefits at the rate of 2.5% for each year of service. This yields an annuity equal to 75% of the CSRS salary base after 30 years of service. Certain public safety workers accrue benefits at 2.5% per year for up to 20 years of service and 2.0% per year for service beyond 20 years.
to his or years of federal employment under FERS. The FERS supplement is paid until age 62 to workers who retire at the minimum retirement age (currently 56) or older with at least 30 years of service, or at age 60 with at least 20 years of service. The FERS supplement terminates at the age of 62, regardless of whether the individual applies for Social Security retired worker benefits at that time.

Cost-of-Living Adjustments

Cost-of-living adjustments (COLAs) protect the purchasing power of retirement benefits from being eroded by inflation. COLAs increase the nominal amount of retirement income, but they do not increase its real value. COLAs have been in effect since 1962 for CSRS, and since the inception of FERS.

Retirement benefits paid under CSRS are fully indexed for inflation, as measured by the Consumer Price Index for Wage and Salary Workers (CPI-W).\textsuperscript{9} The FERS basic annuity is fully price-indexed only if the annual rate of inflation is 2% or less. FERS benefits are partially indexed if inflation is in excess of 2%. If the CPI-W increases by 2% or less, the FERS monthly benefit is increased by the annual percentage increase in the CPI-W. If the CPI-W increases by 2% to 3%, the increase in the FERS annuity is limited to 2%. If the CPI-W increases by more than 3%, the increase in the FERS annuity is equal to the rise in the CPI-W minus one percentage point. Under FERS, COLAs are provided only to retirees who are aged 62 or older, annuitants under age 62 who retired because of a disability, and survivor annuitants.

The Thrift Savings Plan

The Thrift Savings Plan is a defined contribution (DC) retirement plan similar to the 401(k) plans provided by many employers in the private sector.\textsuperscript{10} Newly hired federal employees who participated in a 401(k) plan can, if they choose, roll over their 401(k) account balances into the TSP. Workers who leave the federal government for jobs in other sectors of the economy can leave their money in the TSP—where it will continue to accrue interest, dividends, and capital gains according to the performance of the funds in which they have chosen to invest—or they can roll over their TSP funds on a tax-deferred basis into another tax-qualified retirement savings account such as an IRA or a 401(k) plan. All TSP participants are immediately and fully vested in their contributions to the plan, federal matching contributions, and any growth in the value of their investment from interest, dividends, and capital gains. Participants are fully vested in the 1% agency automatic contributions to the TSP after three years (two years for congressional employees and executive-branch political appointees).

\textsuperscript{9} Under both CSRS and FERS, COLAs are paid out beginning in January each year, based on the percentage increase in the CPI-W for the third calendar quarter (July-Sept.) of the most recent year compared with the average CPI-W for the third calendar quarter of the last year a COLA was determined. In 1994, 1995, and 1996, COLAs for civil service annuitants were delayed from January until April to achieve budgetary savings. There was no automatic COLA for civil service annuitants in 2010 or 2011. In 2013, the automatic COLA for CSRS and FERS is 1.7%. For more details on COLAs for CSRS and FERS annuitants, see CRS Report 94-834, \textit{Cost-of-Living Adjustments for Federal Civil Service Annuities}, by Katelin P. Isaacs.

\textsuperscript{10} “401(k)” refers to the section of the Internal Revenue Code that authorizes deferral of income taxes until the time of withdrawal for contributions to certain kinds of savings plans and for the interest and dividends on those contributions.
P.L. 106-361 (October 27, 2000) allows “rollover distributions” into the TSP from other tax-qualified retirement savings plans, such as those authorized for private-sector firms under Section 401(k) of the tax code and for non-profit organizations under I.R.C. Section 403(b). This law also allows employees to begin making tax-deferred contributions to the TSP immediately upon becoming employed by the federal government. P.L. 106-398 (October 30, 2000) allows uniformed military personnel on active duty or in the ready reserve to participate in the TSP under the same terms and conditions as civilian federal employees, but without matching contributions.11

P.L. 111-31 (June 22, 2009) provides for newly hired federal employees to be enrolled automatically in the TSP at a default contribution rate of 3% of pay. Default contributions are invested in the “G” fund (government security fund) of the TSP. Participants can elect a different contribution rate and select a different investment fund or funds, or they can elect not to contribute to the TSP. P.L. 111-31 also eliminates a previous waiting period for employees under FERS to be eligible to receive agency automatic (1%) and agency matching contributions.

Employee and Agency Contributions

Federal agencies contribute an amount equal to 1% of basic pay to the TSP for each employee under FERS, whether or not the employee chooses to contribute anything to the plan. In 2013, employees can contribute up to $17,500 to the TSP.12 Employees aged 50 and older can contribute an additional $5,500. These employee contributions may be made on a pre-tax basis, in which case neither the contributions nor investment earnings that accrue to the plan are taxed until the money is withdrawn. Alternatively, P.L. 111-31 authorized a qualified Roth contribution option to the TSP. Under a Roth contribution option, employee salary deferrals into a retirement plan are made with after-tax income. Qualified distributions from the Roth TSP plan option—generally, distributions taken five or more years after the participant’s first Roth contribution and after he or she has reached the age of 59½—are tax-free.

In addition, contributions of up to 5% of pay made by employees under FERS are matched by the federal government according to the schedule shown in Table 2. Federal workers covered by CSRS also may contribute to the TSP, but they receive no matching contributions from their employing agencies.

<table>
<thead>
<tr>
<th>Employeea</th>
<th>Government</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>1.0</td>
<td>2.0</td>
<td>3.0</td>
</tr>
<tr>
<td>2.0</td>
<td>3.0</td>
<td>5.0</td>
</tr>
<tr>
<td>3.0</td>
<td>4.0</td>
<td>7.0</td>
</tr>
<tr>
<td>4.0</td>
<td>4.5</td>
<td>8.5</td>
</tr>
<tr>
<td>5.0 or more</td>
<td>5.0</td>
<td>10.0</td>
</tr>
</tbody>
</table>

11 Members of the uniformed services are eligible for matching contributions only in some cases. Matching contributions are permitted only for personnel in critical occupational specialties, and they must agree to re-enlist for six years to be eligible for the agency contribution. The FY2006 National Defense Authorization Act expanded the authority for agency contributions to include the duration of the initial enlistment of enlisted personnel.

12 Maximum annual salary deferrals are set in law at I.R.C. Section 402(g).
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Source: 5 U.S.C. §8432
a. Subject to a maximum of $17,500 in 2013 under I.R.C. §402(g).

Maximum Allowable Thrift Savings Plan Contribution

Prior to July 1, 2001, employees under FERS could contribute no more than the lesser of 10% of pay or the maximum tax-deferred contribution permissible under section 402(g) of the Internal Revenue Code. P.L. 106-554 (December 21, 2000) increased the maximum allowable employee contribution to the TSP by one percentage point each year for five years. Beginning in July 2001, employees in the FERS were allowed to contribute up to 11% of pay to the TSP, and employees in the CSRS were allowed to contribute up to 6% of pay to the TSP. The maximum permissible contribution rose by one percentage point each year until reaching 15% for FERS and 10% for CSRS in 2005. The percentage-of-pay limits on contributions to the TSP were eliminated beginning in 2006. Employee contributions to the TSP are now subject only to the limits applicable under IRC Section 402(g). This limit is $17,500 in 2013. Employees who will be aged 50 or older at any time in 2013 can make additional “catch-up” contributions of up to $5,500.

Penalty on Early Withdrawals

With certain exceptions, I.R.C. Section 72(t) imposes a 10% additional tax on distributions from all qualified plans, including the TSP, unless the individual is over the age of 59½, dies, or becomes disabled.13 This additional tax does not apply to early distributions if they are paid:

1. after the plan participant has reached age 59½;  
2. to a beneficiary after the death of the participant;  
3. because the participant has become disabled;  
4. to an alternate payee under a qualified domestic relations order (QDRO);  
5. to an employee who has separated from service under an early retirement arrangement after reaching age 55;  
6. as dividends paid from an Employee Stock Ownership Plan (ESOP);  
7. through an IRS levy to collect back taxes owed by the plan participant;  
8. to pay medical expenses of the plan participant, a spouse, or dependent, but only to the extent that they exceed 7.5% of adjusted gross income;  
9. as part of a series of substantially equal periodic payments (SEPPs) over the life of the participant or the joint lives of the participant and beneficiary; or,  
10. to a reservist who is ordered to active duty for more than 179 days.

A participant in the TSP must begin taking distributions from the TSP no later than April of the year after the year in which the participant attains the age of 70½, unless the participant is still employed by the government. These distributions must be included in the participant’s taxable income for the year. The requirement to begin taking distributions after the age of 70½ does not apply to qualified Roth contributions, because Roth contributions are made with after-tax income.

13 For more information, see CRS Report RL31770, Individual Retirement Accounts and 401(k) Plans: Early Withdrawals and Required Distributions, by John J. Topoleski.
Participant Loans

Participants may borrow from their TSP accounts. General purpose loans must be repaid within five years. Residential loans taken for the purpose of purchasing a primary residence must be repaid within 15 years. Participant loans may be taken only from participant contributions and attributable earnings and cannot exceed the lesser of one-half of the participant’s vested account balance or $50,000.14

The interest rate for TSP loans is the “G Fund” interest rate at the time the loan agreement is issued by the plan’s record keeper. The rate is fixed at this level for the life of each loan. Interest earned on loans is allocated to the participant account upon repayment. Participants whose loans are in default have until the end of the following calendar quarter to pay the overdue amount. If not repaid by that time, the loan plus accrued interest is treated as a taxable distribution to the plan participant, which may be subject to the 10% penalty on retirement plan distributions made before the age of 59½. If the participant leaves federal service, the balance of the loan must be repaid in full or the loan will be treated as a taxable distribution.

Age-based Withdrawals and Hardship Withdrawals

In general, participants cannot withdraw money from the TSP until they separate from federal employment. Distributions while the participant is still employed by the federal government are permitted only if the individual is experiencing a financial hardship or has reached age 59½. Participants who are over the age of 59½ and are still employed by the federal government can take a single age-based withdrawal from the TSP. The participant must include the withdrawal in his or her taxable income for the year unless the withdrawal is deposited into an IRA or other tax-qualified retirement plan within 60 days.15

A participant can take an in-service withdrawal from the TSP if he or she is experiencing a financial hardship. Hardship withdrawals must be included in the participant’s taxable income and they may be subject to an additional 10% tax if the participant is under 59½ years old. Only the participant’s contributions and earnings on those contributions can be withdrawn and the amount of the withdrawal is limited to the amount of his or her financial need. A participant is prohibited from contributing to the TSP for six months after the date on which he or she receives a hardship withdrawal.

To qualify for a hardship withdrawal, the participant’s financial need must arise from one or more of the following:

- negative monthly cash flow;
- medical expenses that are not covered by insurance;
- personal casualty losses that are not covered by insurance; or
- legal expenses arising from separation or divorce.


TSP Investment Options

The contribution that the TSP will make to a federal employee’s retirement income depends on the value of the account at retirement. The value of the account in turn depends on the worker’s salary during his or her federal service, the percentage of salary contributed to the TSP, the number of years over which investment earnings accrued to these contributions, and the performance of the funds into which the employee directed the contributions. Currently, participants in the TSP can deposit their contributions into one or more of five funds:

- The “C” fund invests in a stock market index fund that replicates the Standard and Poor’s 500 Index of 500 large- to medium-sized U.S. companies.
- The “F” fund invests in bonds in the same proportion as they are represented by the Barclays Capital U.S. Aggregate Bond Index.
- The “G” fund invests in U.S. government securities and pays interest equal to the average rate of return on government securities with maturities of four years or more.
- The “S” fund invests in a stock index fund that tracks the Dow Jones U.S. Completion Total Stock Market Index.
- The “I” fund invests in a stock index fund that replicates the Morgan Stanley Capital International EAFE (Europe, Australasia, Far East) Index.16

In 2005, the TSP introduced “Lifecycle Funds.” The Lifecycle Funds are invested in various combinations of the five existing TSP funds. The allocation of contributions among the five core TSP funds is based on the year that the participant expects to begin withdrawing money from the TSP. As the participant approaches retirement, the proportion of contributions invested in the C, I, and S funds—which invest in stocks—is reduced. The proportion invested in the G and F funds—which invest in bonds—is increased. This helps to protect participants who are nearing retirement from investment losses that would occur from a sharp decline in equity prices. The TSP L funds consist of the L2020, L2030, L2040, and L2050 funds and the L Income Fund.

Historical rates of return for the five core TSP funds are shown in Table 3.

<table>
<thead>
<tr>
<th>Year</th>
<th>G Fund</th>
<th>C Fund</th>
<th>F Fund</th>
<th>S Funda</th>
<th>I Funda</th>
</tr>
</thead>
<tbody>
<tr>
<td>1988</td>
<td>8.8%</td>
<td>11.8%</td>
<td>3.6%</td>
<td>20.5%</td>
<td>26.1%</td>
</tr>
<tr>
<td>1989</td>
<td>8.8%</td>
<td>31.0%</td>
<td>13.9%</td>
<td>23.9%</td>
<td>10.0%</td>
</tr>
<tr>
<td>1990</td>
<td>8.9%</td>
<td>-3.2%</td>
<td>8.0%</td>
<td>-13.6%</td>
<td>-23.6%</td>
</tr>
<tr>
<td>1991</td>
<td>8.1%</td>
<td>30.8%</td>
<td>15.7%</td>
<td>43.5%</td>
<td>12.2%</td>
</tr>
<tr>
<td>1992</td>
<td>7.2%</td>
<td>7.7%</td>
<td>7.2%</td>
<td>11.9%</td>
<td>-12.2%</td>
</tr>
<tr>
<td>1993</td>
<td>6.1%</td>
<td>10.1%</td>
<td>9.5%</td>
<td>14.6%</td>
<td>32.7%</td>
</tr>
<tr>
<td>1994</td>
<td>7.2%</td>
<td>1.3%</td>
<td>-3.0%</td>
<td>-2.7%</td>
<td>7.8%</td>
</tr>
</tbody>
</table>

The “S” and “I” funds were added in 2001 in accordance with the Thrift Savings Plan Act of 1996 (P.L. 104-208).
### Federal Employees’ Retirement System: The Role of the Thrift Savings Plan

<table>
<thead>
<tr>
<th>Year</th>
<th>G Fund</th>
<th>C Fund</th>
<th>F Fund</th>
<th>S Fund(^a)</th>
<th>I Fund(^a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>7.0%</td>
<td>37.4%</td>
<td>18.3%</td>
<td>33.5%</td>
<td>11.3%</td>
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<tr>
<td>1996</td>
<td>6.8%</td>
<td>22.8%</td>
<td>3.7%</td>
<td>17.2%</td>
<td>6.1%</td>
</tr>
<tr>
<td>1997</td>
<td>6.8%</td>
<td>33.2%</td>
<td>9.6%</td>
<td>25.7%</td>
<td>1.5%</td>
</tr>
<tr>
<td>1998</td>
<td>5.7%</td>
<td>28.4%</td>
<td>8.7%</td>
<td>8.6%</td>
<td>20.1%</td>
</tr>
<tr>
<td>1999</td>
<td>6.0%</td>
<td>21.0%</td>
<td>-0.8%</td>
<td>35.5%</td>
<td>26.7%</td>
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<tr>
<td>2000</td>
<td>6.4%</td>
<td>-9.1%</td>
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<td>-14.2%</td>
</tr>
<tr>
<td>2001</td>
<td>5.4%</td>
<td>-11.9%</td>
<td>8.6%</td>
<td>-2.2%</td>
<td>-15.4%</td>
</tr>
<tr>
<td>2002</td>
<td>5.0%</td>
<td>-22.1%</td>
<td>10.3%</td>
<td>-18.1%</td>
<td>-16.0%</td>
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<tr>
<td>2003</td>
<td>4.1%</td>
<td>28.5%</td>
<td>4.1%</td>
<td>42.9%</td>
<td>37.9%</td>
</tr>
<tr>
<td>2004</td>
<td>4.3%</td>
<td>10.8%</td>
<td>4.3%</td>
<td>18.0%</td>
<td>20.0%</td>
</tr>
<tr>
<td>2005</td>
<td>4.5%</td>
<td>5.0%</td>
<td>2.4%</td>
<td>10.5%</td>
<td>13.6%</td>
</tr>
<tr>
<td>2006</td>
<td>4.9%</td>
<td>15.8%</td>
<td>4.4%</td>
<td>15.3%</td>
<td>26.3%</td>
</tr>
<tr>
<td>2007</td>
<td>4.9%</td>
<td>5.5%</td>
<td>7.1%</td>
<td>5.5%</td>
<td>11.4%</td>
</tr>
<tr>
<td>2008</td>
<td>3.8%</td>
<td>-37.0%</td>
<td>5.5%</td>
<td>-38.3%</td>
<td>-42.4%</td>
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<tr>
<td>2009</td>
<td>3.0%</td>
<td>26.7%</td>
<td>6.0%</td>
<td>34.9%</td>
<td>30.0%</td>
</tr>
<tr>
<td>2010</td>
<td>2.8%</td>
<td>15.1%</td>
<td>6.7%</td>
<td>29.1%</td>
<td>7.9%</td>
</tr>
<tr>
<td>2011</td>
<td>2.5%</td>
<td>2.1%</td>
<td>7.9%</td>
<td>-3.4%</td>
<td>-11.8%</td>
</tr>
<tr>
<td><strong>Average Return, 1988-2011</strong></td>
<td><strong>5.8%</strong></td>
<td><strong>10.9%</strong></td>
<td><strong>7.2%</strong></td>
<td><strong>12.4%</strong></td>
<td><strong>6.9%</strong></td>
</tr>
</tbody>
</table>

Source: Federal Retirement Thrift Investment Board. Returns are net of TSP expenses.

a. Actual rates of return for S and I Funds since May 2000. Rates of return for Wilshire 4500 Index and the EAFE Index, respectively, before May 2000.

Note: “Average Return” is the average annual rate of return over the 1988-2011 period.

### TSP Withdrawal Options

At retirement, an employee can withdraw funds from the TSP immediately or at a later date. There are four ways that an employee can withdraw funds from the TSP:

- as a life annuity,\(^{17}\)
- in a single lump-sum payment,
- in a series of monthly payments, either for a fixed number of months or in a fixed dollar amount, until the account is depleted, or
- partly as a lump sum, and partly as an annuity or series of payments.\(^{18}\)

\(^{17}\) A life annuity is a contract between the individual and an insurance company, in which the individual exchanges a lump sum for a guaranteed stream of monthly payment for the rest of his or her life, and often for the lifetime of a surviving spouse. The insurance company invests the lump sum and uses the earnings of the investment as well as the principal to make the payments to the annuitant, which are based both on the estimated rate of return from the investment and actuarial estimates of the annuitant’s remaining life expectancy. TSP annuities are issued by MetLife.
TSP Participation Rates

As of November 2012, there were 4.6 million active and retired participants in the TSP, including both current and former civilian employees and members of the armed services. Among civilian federal employees who were enrolled in FERS, 86% of those who were eligible to participate in the TSP were making payroll contributions. Among employees enrolled in the CSRS, 63% were contributing to the TSP. The average TSP account balance in November 2012 was $89,311 among FERS participants and $89,839 among CSRS participants.

As of September 2012, assets invested in the TSP totaled $325.7 billion. The “G” fund held assets of $136.6 billion; the “C” fund held assets of $78.7 billion; and the “F” fund held assets of $25.4 billion. The “S” fund held assets of $25.1 billion and the “I” fund held assets of $16.2 billion. The new “L” funds—which invest in the other five TSP funds—held assets of $43.7 billion.

As a share of TSP assets, the “G” fund held 43% of the total, the “C” fund held 25%, the “F” fund held 8%, the “S” fund held 8%, the “I” fund held 5%, and the “L” funds held 14% of the total assets in the TSP. The share of total TSP assets held in each fund reflects the historical rates of return among the funds, the distribution of employer and employee contributions among the funds, and transfers of account balances among the funds by participating employees.19

Illustrations of the TSP’s Role in Providing Retirement Income

Using a series of simplifying assumptions, the following tables illustrate the role of the TSP in assuring an adequate income during retirement for federal employees enrolled in the FERS. Each table shows the annual salary in the year before retirement for four employees: one at the GS-4 level, one at GS-8, one at GS-12, and one at GS-15. The salaries shown are the estimated pay at step 8 of the pay grades in the year 2042 (Table 4 and Table 5) or 2032 (Table 6 and Table 7), assuming that future federal salary increases 3.9% per year.20 The salary amounts are expressed in their 2013 dollar equivalents, based on the Social Security Actuary’s estimated future inflation rate of 2.8% per year. The tables show the estimated replacement rates during the first year of retirement for the annual income provided by converting an employee’s TSP account into a level, single-life annuity.21

(...continued)

18 The annuity or series of payments must begin at the time the lump sum is paid.
19 TSP totals for fund percentages exceed 100% due to rounding.
20 This salary growth assumption comes from the U.S. Social Security Administration’s “The 2012 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Trust Funds;” Table V. B1 (available online: http://www.ssa.gov/oact/tr/2012/tr5b1.html). This assumption—and the ensuing illustrations of FERS replacement rates—does not take into consideration the recent “pay freeze” for federal workers. This pay freeze, as authorized by the Continuing Appropriations and Surface Transportation Extensions Act, 2011 (P.L. 111-322; signed December 22, 2010), suspended statutory pay adjustments (under section 5343(a) of title 5, U.S. Code) for the period between January 1, 2011, and December 31, 2012. P.L. 112-175 extended this pay freeze until April 7, 2013. For more information on pay for federal workers, including the process by which pay adjustments are made, see CRS Report RL34463, Federal White-Collar Pay: FY2009 and FY2010 Salary Adjustments, by Barbara L. Schwemle.
21 A “single-life annuity” pays benefits until the annuitant dies. A “joint and survivor annuity” pays a smaller monthly benefit, but guarantees continued payment until the death of the annuitant or the annuitant’s spouse, whichever comes (continued...)
Within each of the four tables, two factors are varied: pay grade and the employee contribution to the TSP. Final salaries and retirement income replacement rates are shown for each of four illustrative pay grades. The replacement rate is shown for employees who make no contribution to the TSP, and thus receive only the agency automatic 1% contribution; for workers who contribute 5% of pay, and therefore receive a 5% contribution from their employing agencies; and for workers who contribute 10% of pay, which results in the same 5% agency contribution as would a 5% employee contribution.

Across the four tables, two factors are varied: the assumed rate of return on contributions to the TSP and the employees’ number of years of service at retirement. The results shown in Table 4 and Table 6 are based on a constant, nominal rate of return on investment of 6.0% per year. In Table 5 and Table 7, the results are based on a constant, nominal rate of return of 8.0% per year. Because the rate of inflation is assumed in these estimates to be 2.8% per year, the real rate of return on investment is 3.1% in Table 4 and Table 6, whereas in Table 5 and Table 7 the real rate of return on investment is 5.1% per year. In Table 4 and Table 5, the replacement rates have been estimated for a federal employee who retires on December 31, 2042, at the age of 62 after 30 years of service under FERS. In Table 6 and Table 7, the replacement rates have been estimated for an employee who retires on December 31, 2032, at the age of 62 after 20 years of service under FERS.

The results presented in each of the following tables assume that the employee contributed the same percentage of pay to the TSP each year over the length of his or her entire career. The tables illustrate the effects of career-long employee contribution rates of 0%, 5%, and 10%. Table 4 and Table 5 show the replacement rates after a 30-year career, assuming nominal rates of return on investment of 6.0% per year and 8.0% per year, respectively. Obviously, actual rates of return on an employee’s TSP account will vary from year to year, and over 30 years an employee could achieve average rates of return that are higher or lower than the results shown here. Moreover, many employees begin their careers contributing little or nothing to the TSP and gradually increase their contributions as their incomes increase, and as they become more aware of the need to save for retirement. Consequently, these examples should be regarded as illustrations only.

TSP Estimated Replacement Rates for a 30-Year Employee

The proportion of pre-retirement income that will be replaced by converting the employee’s TSP account into a retirement annuity will depend on the individual’s age, the balance in the account, and the interest rate at which the account balance is converted to an annuity. The account balance at retirement depends on the percentage of pay that the employee contributed throughout his or her career, the rate of return earned by the funds in which these contributions were invested, and the length of time over which contributions to the TSP were in the fund earning interest, dividends, and capital gains. For any given account balance, an older individual will receive a larger annuity than a younger person. Likewise, a higher annuity interest rate will provide a larger

(...continued)

later. A “level annuity” pays a fixed monthly benefit year after year. A “graded annuity” pays a smaller initial monthly benefit, but the benefit is increased by a fixed percentage (often 3%) as a means of preserving the real value of the benefit against the effects of inflation.

22 See Table 3 for actual historical rates of return for TSP. For the purpose of simplification, constant rates of return for TSP—either 6.0% per year or 8.0% per year—are assumed in this report’s illustrative calculations.

23 The real rates of return are derived as follows: 1.06/1.028 = 1.031 and 1.08/1.028 = 1.051.
annuity. The annuity interest rate is determined by the prevailing long-term interest rates in the
nation’s credit markets.\textsuperscript{24}

Employees enrolled in the FERS have an amount equal to 1% of pay contributed to the Thrift
Savings Plan by their employing agencies, even if the employee makes no voluntary contributions
to the TSP. This amount is not deducted from employee pay. It is paid by the employing agency
from sums appropriated to it by Congress for salaries and related expenses. Assuming a nominal
annual investment return of 6.0%, an employee who retires after 30 years of federal employment
will be able to replace only about 2% of final salary from his or her TSP account if he or she
never makes a voluntary contribution to the plan. (See Table 4.) Assuming an 8.0% rate of return,
the TSP would replace about 3% of pay for a worker who makes no voluntary contributions. (See
Table 5.)

By contributing 5% of pay, however, the TSP replacement rate can be boosted substantially. Even
assuming a nominal rate of return on investment of 6.0%, annual employee contributions of 5%
of pay to the TSP would boost the replacement rate to 22% after a 30-year career.

\begin{table}
\centering
\caption{Illustration of TSP Annuity Replacement Rates under FERS for an Employee Retiring in 2042 at Age 62 After 30 Years of Service}
\begin{tabular}{lcccc}
\hline
 & GS-4 & GS-8 & GS-12 & GS-15 \\
Final salary in 2013 dollars: & $47,001 & $72,139 & $115,550 & $190,998 \\
\hline
TSP Contribution Rates & Percentage of pre-tax final salary replaced: & \\
TSP monthly annuity with only 1% agency automatic contribution & 2% & 2% & 2% & 2% \\
TSP monthly annuity with 5% from employee and 5% agency match & 22% & 22% & 22% & 22% \\
TSP monthly annuity with 10% from employee and 5% from agency & 33% & 33% & 33% & 33% \\
\hline
\end{tabular}
\end{table}

Source: Estimates prepared by the Congressional Research Service.

Notes: Estimates of income from the TSP are based on a level, single-life annuity at the January 2013 annuity interest rate of 1.750%. Other simplifying assumptions used in illustration calculations: 3.9% salary growth per year; 2.8% inflation per year; a constant TSP contribution as a percentage of salary made by the employee per year; and a constant annual nominal rate of return on TSP account (6.0% for Table 4).

The impact on replacement rates of the first 5% of employee contributions is especially large
because each additional percentage of pay contributed by the employee brings matching
contributions from the employer. The first 3% of pay contributed by the employee is matched
dollar-for-dollar by the employing agency, and the next 2% of pay is matched by the employer at
the rate of 50 cents on the dollar.

\textsuperscript{24} The January 2013 annuity interest rate of 1.750% is used to calculate the TSP replacement rates in this report.
Table 5. Illustration of TSP Annuity Replacement Rates under FERS for an Employee Retiring in 2042 at Age 62 After 30 Years of Service

(Assuming an annual nominal rate of return on TSP of 8.0%)

<table>
<thead>
<tr>
<th>Final salary in 2013 dollars</th>
<th>GS-4</th>
<th>GS-8</th>
<th>GS-12</th>
<th>GS-15</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSP Contribution Rates</td>
<td>Percentage of pre-tax final salary replaced:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TSP monthly annuity with only 1% agency automatic contribution</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>TSP monthly annuity with 5% from employee and 5% agency match</td>
<td>30%</td>
<td>30%</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>TSP monthly annuity with 10% from employee and 5% from agency</td>
<td>45%</td>
<td>45%</td>
<td>45%</td>
<td>45%</td>
</tr>
</tbody>
</table>

Source: Estimates prepared by the Congressional Research Service.

Notes: Estimates of income from the TSP are based on a level, single-life annuity at the January 2013 annuity interest rate of 1.750%. Other simplifying assumptions used in illustration calculations: 3.9% salary growth per year; 2.8% inflation per year; a constant TSP contribution as a percentage of salary made by the employee per year; and a constant annual nominal rate of return on TSP account (8.0% for Table 5).

Higher investment returns would result in a higher replacement rate. For an employee who contributes 5% of pay over a 30-year career, an 8.0% annual rate of return on investment would result in a TSP account balance that, when converted to a retirement annuity would replace 30% of final salary. (See Table 5.)

Employee contributions above 5% of pay are not matched by the employing agency, but they still have a substantial impact on replacement rates. Assuming a 6.0% annual rate of return, a 10% employee contribution to the TSP over a 30-year career would result in a replacement rate from the TSP of approximately 33% of final pay. (See Table 4.) Assuming a rate of return on investment of 8.0%, employees who contribute 10% of pay over a 30-year career can replace about 45% of their final pay from the TSP. (See Table 5.)

TSP Estimated Replacement Rates for a 20-Year Employee

Table 6 and Table 7 show the estimated TSP replacement rates for an employee who retires at age 62 after 20 years of service under FERS. For employees who make no voluntary contributions to the TSP, the replacement rates are negligible. For an employee with 20 years of service who makes no contributions to the TSP, the agency automatic 1% contribution would replace about 1% of final pay based on a 6.0% annual rate of return. (See Table 6.) Assuming an 8.0% annual investment return, the agency automatic contribution would replace only 2% of pay for an employee retiring after 20 years of service. (See Table 7.)

The estimates displayed in Table 6 and Table 7 also show that a worker who participates in the TSP only during the 20 years immediately preceding retirement will achieve a much lower income replacement rate than an employee who participates for 30 years. Table 6 shows that an employee contributing 5% of pay and earning a 6% annual rate of return would be able to replace about 13% of final pay from his or her TSP account. This is 8 percentage points lower than the 22% replacement rate achieved by an employee who contributes 5% of pay over 30 years and earns a 6% annual return. Contributing 10% of pay over 20 years at an annual investment return
of 6.0% would raise the employee’s replacement rate to 23%; however, this is 10 percentage points below the 33% replacement rate achieved by an employee who contributes 10% of pay over a 30-year period, assuming a 6.0% rate of return.

**Table 6. Illustration of TSP Annuity Replacement Rates for FERS-Covered Employee Retiring in 2032 at Age 62 After 20 Years of Service**

*(Assuming an annual nominal rate of return on investment in TSP = 6.0%)*

<table>
<thead>
<tr>
<th>Final salary in 2013 dollars:</th>
<th>GS-4</th>
<th>GS-8</th>
<th>GS-12</th>
<th>GS-15</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSP Contribution Rates</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TSP monthly annuity with only 1% agency automatic contribution</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>TSP monthly annuity with 5% from employee and 5% from agency</td>
<td>13%</td>
<td>13%</td>
<td>13%</td>
<td>13%</td>
</tr>
<tr>
<td>TSP monthly annuity with 10% from employee and 5% from agency</td>
<td>19%</td>
<td>19%</td>
<td>19%</td>
<td>19%</td>
</tr>
</tbody>
</table>

**Source**: Estimates prepared by the Congressional Research Service.

**Notes**: Estimates of income from the TSP are based on a level, single-life annuity at the January 2013 annuity interest rate of 1.750%. Other simplifying assumptions used in illustration calculations: 3.9% salary growth per year; 2.8% inflation per year; a constant TSP contribution as a percentage of salary made by the employee per year; and a constant annual nominal rate of return on TSP account (6.0% for Table 6).

At an 8.0% annual rate of return, an employee contributing 5% of pay each year can achieve a replacement rate of 23% from the TSP. (See Table 7.)

**Table 7. Illustration of TSP Annuity Replacement Rates for FERS-Covered Employee Retiring in 2032 at Age 62 After 20 Years of Service**

*(Assuming an annual nominal rate of return on investment in TSP = 8.0%)*

<table>
<thead>
<tr>
<th>Final salary in 2013 dollars:</th>
<th>GS-4</th>
<th>GS-8</th>
<th>GS-12</th>
<th>GS-15</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSP Contribution Rates</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TSP monthly annuity with only 1% agency automatic contribution</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>TSP monthly annuity with 5% from employee and 5% agency match</td>
<td>15%</td>
<td>15%</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>TSP monthly annuity with 10% from employee and 5% from agency</td>
<td>23%</td>
<td>23%</td>
<td>23%</td>
<td>23%</td>
</tr>
</tbody>
</table>

**Source**: Estimates prepared by the Congressional Research Service.

**Notes**: Estimates of income from the TSP are based on a level, single-life annuity at the January 2013 annuity interest rate of 1.750%. Other simplifying assumptions used in illustration calculations: 3.9% salary growth per year; 2.8% inflation per year; a constant TSP contribution as a percentage of salary made by the employee per year; and a constant annual nominal rate of return on TSP account (8.0% for Table 7).
Additional Income Replacement from Social Security and the FERS Annuity

The TSP was designed to supplement retirement income from the FERS annuity as well as Social Security. For a federal employee who begins his or her career in 2013 and retires at age 62 after 30 years of service, the FERS basic annuity will provide first-year retirement income equal to about 32% of the worker’s final annual salary.\(^{25}\) For a worker who begins his or her career in 2013 and retires at age 62 with 20 years of service, the basic FERS retirement annuity would replace about 21% of final earnings, regardless of the GS-level from which he or she retires.\(^{26}\) In both of these cases, the dollar amount of the annuity will be higher for higher-paid employees, but the replacement rate will be approximately the same, regardless of the employee’s final salary level.

The replacement rate for Social Security benefits, however, declines as a worker’s income increases. The percentage of earnings replaced by Social Security is greater for low-wage workers than for high-wage workers.\(^{27}\) During their years as federal employees covered by FERS, individuals are covered by Social Security. But it may also be the case that the career histories of these federal employees include additional non-federal, Social-Security-covered employment.\(^{28}\)

The Social Security Administration (SSA) estimates that for individuals who retire at age 65 in 2012, Social Security benefits would replace about 41% of career-average earnings for a “scaled medium earnings” hypothetical worker, who has career-average earnings of $40,702. This earnings profile is similar to a GS-4 federal employee. For a “scaled high earnings” hypothetical worker retiring at age 65 in 2012, who has career-average earnings of $65,124 and could be compared with a GS-8 federal employee, Social Security benefits would replace about 34% of career-average earnings. Finally, GS-12 and GS-15 employees could be compared with a “steady maximum earnings” hypothetical worker (with career-average earnings of $94,006) for whom Social Security benefits would replace about 27% for retirement at 65 in 2012, as estimated by SSA.\(^{29}\)

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\(^{25}\) Estimate prepared by the Congressional Research Service, assuming (1) federal salary at step 8 of pay grades in the year 2042; (2) future, average federal salary increases of 3.9% per year; and (3) average inflation rate of 2.8% per year. This estimate uses the same assumptions as the estimates in Tables 4 and 5.

\(^{26}\) Estimate prepared by the Congressional Research Service, assuming (1) federal salary at step 8 of pay grades in the year 2032; (2) future, average federal salary increases of 3.9% per year; and (3) average inflation rate of 2.8% per year. This estimate uses the same assumptions as the estimates in Tables 6 and 7.

\(^{27}\) Social Security is intended to replace a relatively higher percentage of career-average pay for low-wage workers than for high-wage workers in part because Congress recognized when designing the program that low-wage workers are less able to save for retirement.

\(^{28}\) To qualify for a retired worker Social Security benefit, an individual must accumulate at least 40 quarters of covered employment, or 10 years of Social Security-covered employment (among other requirements). These Social Security benefits are based on the average of a worker’s highest 35 years of earnings. Federal employees, including employees covered by FERS, may qualify for Social Security benefits based on a lifetime earnings and employment history that includes more than federal service.

Workers Who Leave Federal Employment Before Reaching Retirement Age

For employees who switch jobs one or more times over the course of their careers, a defined contribution retirement plan such as the TSP has an advantage over the traditional defined benefit pension in that the value of the accrued benefit can continue to increase until the employee reaches retirement age. All that is required for this to occur is for the employee to refrain from spending any lump-sum distributions that he or she may receive before retiring and for the accrued benefit to remain invested in a tax-deferred retirement account that achieves a total rate of return before retirement that is greater than the rate of inflation.

Employees who have become vested in a traditional defined benefit pension—including the FERS basic annuity—are legally entitled to the benefit they have earned upon reaching the plan’s normal retirement age even if at that time they no longer work for the employer where they earned the pension. In most defined benefit pension plans, including FERS, the annuity is based on the employee’s actual earnings during their period of employment with the firm. These salary amounts are not adjusted for inflation between the time the employee leaves the firm and the date of retirement. For example, consider an employee who leaves the federal government for another employer at age 40 after 10 years of service in 1991. If this individual’s highest three consecutive years of earnings averaged $50,000, he or she would be entitled to an annuity of $5,000 per year beginning at age 62. The worker in this example would be eligible to begin receiving the $5,000 annuity at age 62 in 2013, 22 years after leaving the federal government. If inflation were to average 3.0% per year over those 22 years, the retiree’s first-year annuity of $5,000 would be worth only about $2,600 in 2013 dollars.

In contrast to the example just cited, money held in a defined contribution plan like the TSP can continue to grow throughout an individual’s working life, regardless of how often he or she changes jobs. If the employee in the example above had contributed 10% of pay to the TSP each year and the contributions had earned an average rate of return of 6%, the account would have reached a value of approximately $81,000 after 10 years in 1991. If the departing employee were to leave this money invested in the TSP or transfer it to another tax-deferred retirement account, this sum would continue to grow until the employee withdrew the funds. Assuming that the funds earned an annual return of 6.0%, the total would increase to $291,887 by the time he or she reaches the age of 62 in 2013, 22 years after leaving the federal government. At current

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30 FERS employees accrue benefits each year equal to 1.0% of the average of their high-3 pay. An employee with five or more years of service can receive a full annuity at age 62.

31 Once payment of a FERS annuity begins, it is protected from inflation by annual cost-of-living adjustments—but only partially and only for retirees age 62 and older. See CRS Report 94-834, Cost-of-Living Adjustments for Federal Civil Service Annuities, by Katelin P. Isaacs.

32 Based on contributing 10% of pay (plus 5% employer match) from a starting salary of $32,000 and ending salary of $52,000 to an account earning 6.0% compounded annually.

33 Departing employees who have not reached age 55 can leave their TSP accounts intact, in which case they will continue to accrue interest, dividends, and capital gains until the individual withdraws the money. They also can “roll over” their TSP accounts into another tax-qualified retirement account such as an Individual Retirement Account (IRA) or another employer’s 401(k). Alternatively, a departing employee can withdraw his or her funds from the TSP without rolling them over into another account, in which case both regular income taxes and a 10% tax penalty will apply.
interest rates, this would be sufficient to purchase an annuity that would pay the retiree about $17,553 per year ($1,462 per month) for the rest of his or her life.34

The Thrift Savings Plan Enhancement Act of 2009

P.L. 111-31, the Family Smoking Prevention and Tobacco Control Act, was signed into law by President Barack Obama on June 22, 2009. P.L. 111-31 contains the Thrift Savings Plan Enhancement Act as Title I of Division B of the bill. As enacted, P.L. 111-31:

- provides for newly hired federal employees to be enrolled automatically in the Thrift Savings Plan (TSP) at a default contribution rate of 3% of pay;
- requires the Federal Retirement Thrift Investment Board to establish within the TSP a qualified Roth contribution program that provides for after-tax contributions and tax-free distributions;
- gives the Federal Retirement Thrift Investment Board authority to allow TSP participants to invest in mutual funds in addition to the five investment funds now included in the TSP;
- requires the Thrift Board to submit to Congress an annual report that includes demographic information about TSP participants and fund managers;
- requires participants to sign an acknowledgement of risk if they invest contributions in any investment option other than government securities;
- grants the executive director of the TSP authority to issue subpoenas under certain circumstances;
- allows funds held in an individual’s TSP account to be subject to court orders with respect to payment of restitution to victims of certain crimes;
- requires the Secretary of Defense to report to Congress the estimated cost of an agency match on contributions to the TSP by members of the uniformed services; and
- allows the surviving spouse of a deceased TSP participant to maintain the decedent’s account with the TSP.

Conclusion

The Thrift Savings Plan plays a pivotal role in helping federal workers achieve adequate retirement income. Employees enrolled in the FERS who do not make voluntary contributions to the TSP, and thus receive only the 1% agency automatic contribution, will be able to replace only 1% to 3% of final annual salary from the TSP at retirement. Most workers in the lower and middle ranges of the federal salary scale will be able to achieve the 70% salary replacement recommended by many pension analysts from the benefits paid by Social Security and the FERS basic retirement annuity, but this is not so for higher-wage federal workers. Federal employees at

34 Based on a level, single-life annuity at an interest rate of 1.750% (January 2013).
all income levels can significantly boost their retirement income by contributing to the TSP, and such contributions are essential in order for those in the upper third of the federal pay scale to achieve a level of income that will allow them to maintain their pre-retirement standard of living.
Appendix. Administration of the Thrift Savings Plan

The Thrift Savings Plan is administered by an independent government agency, the Federal Retirement Thrift Investment Board, which is charged in statute with operating the Thrift Plan prudently and solely in the interest of the participants and their beneficiaries. The assets of the Thrift Plan are maintained in the Thrift Savings Fund, which invests the assets in accordance with participant instructions in five investment funds authorized by Congress to be included in the plan. The Thrift Board currently contracts with BlackRock Institutional Trust Company to manage the index funds in which the F, C, S, and I Fund assets are invested. The contracts for each fund are open to competitive bids by qualified investment managers every three to five years.

The costs of administering the TSP are paid from the assets of the thrift fund. Administrative costs of the TSP in 2011 were 2.5 basis points (one basis point is 1/100th of 1 percent, or 0.01%), or about 25 cents for each $1,000 invested.

Participant Accounts

The Thrift Plan maintains individual accounts for each participant. Participant accounts are credited with the participant’s contributions and agency contributions, and are charged for withdrawals. The value of the participant’s account reflects the number of shares and the daily share prices of the funds in which the account is invested. Administrative expenses are a component of the share price calculation. The benefit to which a participant is entitled is the participant’s vested account. Thrift Plan participants can receive account-balance information and conduct transactions by automated telephone service or on the Thrift Plan’s website.

The Federal Retirement Thrift Investment Board

The Federal Retirement Thrift Investment Board was established by the FERS Act of 1986. The board is responsible for developing the investment policies of the Thrift Plan and overseeing the management of the plan, which is under the day-to-day direction of an Executive Director appointed by the board.

Three of the five members of the board—including the chairman—are appointed by the President. The President chooses a fourth member of the board in consultation with the Speaker of the House and the House minority leader and a fifth member in consultation with the majority and minority leaders of the Senate. Members of the board serve four-year terms and all nominations are subject to Senate confirmation. The law requires that all nominees to the board must be

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36 TSP expense ratio data are available at TSP.gov https://www.tsp.gov/investmentfunds/fundsoverview/expenseRatio.shtml.
37 The URL of the Thrift Savings Plan website is http://www.tsp.gov.
Communication and Education

The Thrift Board communicates with plan participants to help them better understand the investment choices, benefits, and administration of the TSP. Employing agencies distribute information, including the Summary of the Thrift Savings Plan for Federal Employees, which provides a comprehensive description of the Plan, as well as booklets describing the loan program, withdrawal programs, and annuity options under the plan. Investment information also is provided through the TSP Fund Sheet and the Managing Your Account leaflets which are available on the TSP website. The Thrift Board also issues a quarterly newsletter, TSP Highlights. Participants can obtain their account balances from the website, request contribution allocations and interfund transfers or, in some cases, loans and withdrawals. The website also provides various calculators that can be used as retirement planning tools. A TSP video is available that explains the basics of the TSP. TSP Bulletins are issued regularly to inform agency personnel and payroll specialists of current operating procedures. The ThriftLine, the Board’s toll-free automated voice response system, provides both general plan and account-specific information.

The authorizing legislation that established the Thrift Board defines the board’s authority and responsibilities. It provides for substantial independence of the board from political pressures.

Authority

The Thrift Board has the authority to

- appoint the Executive Director of the Thrift Plan;
- remove the Executive Director for cause (requires four votes);
- establish investment policies for the Thrift Plan;
- instruct the Director to take whatever actions the Board deems appropriate to carry out the policies it establishes; and
- submit to the Congress legislative proposals relating to its responsibilities under federal law.

Independence

Members of the board are nominated by the President and confirmed by the Senate, but once confirmed they cannot be removed from their four-year terms without good cause. The selection and nomination process are designed to assure that members of the board are individuals who are supported by the President and Congress. They serve in times of good behavior, rather than at the pleasure of the President or Congress, assuring that they can carry out the responsibilities of their positions without removal from office. The Federal Retirement Thrift Investment Board receives no appropriations from Congress. Administrative expenses are paid through agency-automatic

contributions forfeited by employees who leave federal service before they have vested and charges against participant accounts.

**Responsibility**

The law requires that the members of the board shall discharge their responsibilities solely in the interest of participants and beneficiaries. In practice, this means that the investment policies and management practices of the fund are evaluated by the board exclusively in reference to the efficient and prudent management of the fund’s assets. This exclusive responsibility serves to further insulate the board from pressures to adopt investment policies or management practices that might not be in the long-term interest of preserving and increasing the security and investment performance of the fund’s assets.

**Oversight**

To assure that the members of the Thrift Board remain aware of the interests and concerns of Thrift Plan participants and beneficiaries, the authorizing legislation established the Employee Thrift Advisory Council. This 14-member council is appointed by the chairman of the Thrift Board and must include representatives of federal employee and Postal Service labor organizations, managerial employees, supervisory employees, female employees, senior executives, and annuitants. All fiduciaries of the plan, including members of the Thrift Board, are required by law to be bonded. The Secretary of Labor is authorized by law to investigate any suspected breach of duty by a fiduciary of the plan. The financial statements of the Thrift Board are audited regularly by an independent accounting firm. Congressional oversight of the Thrift Plan is performed by the House Committee on Oversight and Government Reform and the Senate Committee on Homeland Security and Governmental Affairs.

**Author Contact Information**

Katelin P. Isaacs  
Analyst in Income Security  
kisaacs@crs.loc.gov, 7-7355

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40 A “fiduciary” is a person in a position of trust with regard to the property of another. A “bond” is form of insurance against the potential malfeasance of a plan fiduciary.