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Federal Employees' Retirement System: Budget and Trust Fund Issues

Abstract
[Excerpt] Retirement annuities for civilian federal employees are provided mainly through two programs: the Civil Service Retirement System (CSRS) and the Federal Employees' Retirement System (FERS). Under both of these systems, retirement annuities are financed through a combination of employee and employer contributions to the Civil Service Retirement and Disability Fund (CSRDF). All assets of the CSRDF are invested in U.S. Treasury bonds and other securities backed by the full faith and credit of the U.S. government. Retirement annuities for federal employees are paid from the CSRDF regardless of whether the benefits were accrued under CSRS or FERS.

FERS annuities are fully funded by the sum of employee and employer contributions and interest earned by the Treasury bonds held by the CSRDF. The federal government makes supplemental payments into the CSRDF on behalf of employees covered by the CSRS because employee and agency contributions and interest earnings do not meet the full cost of the benefits earned by employees covered by that system.

Keywords
Civil Service Retirement System, CSRS, Federal Employees' Retirement System, FERS, Civil Service Retirement and Disability Fund, CSRDF, retirement, federal employees

Comments
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Congressional Research Service

Federal Employees' Retirement System: Budget and Trust Fund Issues

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Summary

Retirement annuities for civilian federal employees are provided mainly through two programs: the Civil Service Retirement System (CSRS) and the Federal Employees' Retirement System (FERS). Under both of these systems, retirement annuities are financed through a combination of employee and employer contributions to the Civil Service Retirement and Disability Fund (CSRDF). All assets of the CSRDF are invested in U.S. Treasury bonds and other securities backed by the full faith and credit of the U.S. government. Retirement annuities for federal employees are paid from the CSRDF regardless of whether the benefits were accrued under CSRS or FERS.

FERS annuities are fully funded by the sum of employee and employer contributions and interest earned by the Treasury bonds held by the CSRDF. The federal government makes supplemental payments into the CSRDF on behalf of employees covered by the CSRS because employee and agency contributions and interest earnings do not meet the full cost of the benefits earned by employees covered by that system.

The Office of Personnel Management (OPM) estimated that in FY2012, obligations from the CSRDF would total $74.7 billion, of which $74.3 billion will represent annuity payments to retirees and survivors. Other outlays consist of refunds, payments to estates, and administrative expenses. Outlays from the fund are projected to increase by 4.5% to $78.0 billion in 2013, of which $77.7 billion will represent annuity payments. OPM estimated that receipts to the CSRDF from all sources would be $95.1 billion in 2012 and $94.2 billion in 2013. The year-end balance of the CSRDF was projected to increase from $812.5 billion at the end of 2012 to $823.2 billion at the end of 2013.

The annual income of the CSRDF will increase from $95.2.0 billion in 2010 to an estimated $155.5 billion in 2025 and to $1.2 trillion in 2085. The total expenses of the fund are projected to rise more slowly, increasing from $69.3 billion in 2011 to an estimated $116.2 billion in 2025 and to $669.7 billion in 2085. Consequently, the assets held by the CSRDF also are projected to increase steadily, rising from $784.6 billion in 2011 to an estimated $1.3 trillion in 2025 and $13.9 trillion in 2085. Expenditures from the CSRDF currently are about 36% as large as federal expenditures for the salaries and wages paid to federal employees. Pension expenditures are projected to decline relative to the government's wage and salary expenses, beginning around 2020. By 2085, the expenditures of the CSRDF are estimated to be only about 23% as large as the government's expenditures for wage and salary payments to employees.

Because CSRS retirement benefits have never been fully funded by employer and employee contributions, the Civil Service Retirement and Disability Fund has an unfunded liability. The unfunded liability was $622.3 billion in FY2010. According to actuarial estimates, the unfunded liability of the CSRDF will continue to rise until about 2023, when it will peak at $684.8 billion. From that point onward, the unfunded liability will steadily decline and is projected to turn into a surplus of $716.7 billion by 2085. Actuarial estimates indicate that the unfunded liability of the CSRS does not pose a threat to the solvency of the trust fund. In its annual report, OPM has stated that "the total assets of the CSRDF, including both CSRS and FERS, continue to grow throughout the term of the projection, and ultimately reach a level of over 4.7 times payroll, or nearly 20 times the level of annual benefit outlays" by 2085. Unlike the Social Security trust fund, there is no point over the next 70 years at which the assets of the Civil Service Retirement and Disability Fund are projected to run out.

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Introduction

Pensions for civilian federal employees are provided through two programs, the Civil Service Retirement System (CSRS) and the Federal Employees Retirement System (FERS). CSRS was authorized by the Civil Service Retirement Act of 1920 (P.L. 66-215) and FERS was established by the Federal Employees' Retirement System Act of 1986 (P.L. 99-335). Under both CSRS and FERS, employees and their employing agencies make contributions to the Civil Service Retirement and Disability Fund (CSRDF), from which pension benefits are paid to retirees and their surviving dependents. Retirement and disability benefits under FERS are fully funded by employee and employer contributions and interest earned by the bonds in which the contributions are invested. The cost of the retirement and disability benefits earned by employees covered by CSRS, on the other hand, are not fully funded by agency and employee contributions and interest income. The federal government therefore makes supplemental payments each year into the civil service trust fund on behalf of employees covered by CSRS. Even with these additional payments into the trust fund, however, CSRS pensions are not fully pre-funded.

Prior to 1984, federal employees did not pay social security payroll taxes and did not earn social security benefits. The Social Security Amendments of 1983 (P.L. 98-21) mandated Social Security coverage for civilian federal employees hired on or after January 1, 1984. This change was made in part because the Social Security system needed additional cash contributions to remain solvent. Enrolling federal workers in both CSRS and Social Security, however, would have resulted in duplication of some benefits and would have required employee contributions equal to more than 13% of workers' salaries. Consequently, Congress directed the development of the FERS, with Social Security as the cornerstone. The FERS is composed of three elements: (1) Social Security, (2) the FERS basic retirement annuity and the FERS supplement, and (3) the Thrift Savings Plan (TSP).[1] All permanent federal employees initially hired 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.

Fundamentals of Pension Plan Financing

Retirement plans are classified as either *defined benefit* (DB) plans or *defined contribution* (DC) plans. In a defined benefit plan, the retirement benefit typically is based on an employee's salary and years of service. A DB plan must offer participants the option to take their benefit as a life annuity. A defined contribution plan is much like a savings account maintained by the employer on behalf of each participating employee. The employer or the employee or both contribute to an account, which is invested in assets such as stocks and bonds. In some DC plans, the amount of the employer contribution depends on how much the employee contributes from his or her pay. When the worker retires, he or she receives the balance in the account, which is the sum of all the contributions that have been made plus interest, dividends, and capital gains (or losses). This is usually paid as a lump-sum, but the employee sometimes has the option to receive benefits as a series of fixed payments over a period of years or as an annuity.

[1] This report describes the financing of CSRS and the FERS basic annuity. The Thrift Savings Plan is described in CRS Report RL30387, *Federal Employees' Retirement System: The Role of the Thrift Savings Plan*, by Katelin P. Isaacs.

An important difference between defined benefit plans and defined contribution plans is that the *employer* bears the financial risk in a defined benefit plan, whereas the *employee* bears the financial risk in a defined contribution plan. In a DB plan, the employer promises to provide retirement benefits equal to a certain dollar amount or a specific percentage of the employee's pay. Under federal law, employers in the private sector are required to pre-fund these benefits by setting aside money in a trust fund, which is typically invested in stocks, bonds, and other assets. The employer is at risk for the full amount of retirement benefits its employees have earned. If the assets held in the pension fund are worth less than the present value of the benefits that have been accrued under the plan, the employer is required by law to make up this deficit—called an unfunded liability—through additional contributions over a period of years.

In a DC plan, it is the employee who bears the risk that markets will decline ("market risk") or that the specific investments he or she chooses will fall in value ("investment risk"). If the contributions to the account are inadequate, or if the securities in which the account is invested lose value or increase in value too slowly, the employee risks having an income in retirement that is too small to maintain his or her desired standard of living. If this situation occurs, the worker might find it necessary to delay retirement.

Pre-funding of Pension Benefits in the Private Sector

Private-sector employers are not required to provide retirement plans for their employees, but those that do must comply with the Employee Retirement Income Security Act of 1974 (ERISA; P.L. 93-406).[2] ERISA sets standards that plans must meet with respect to reporting and disclosure, employee participation and vesting, plan funding, and fiduciary standards.

Because employers cannot be certain that their revenues in future years will be sufficient to pay the pension benefits they owe to retired workers, ERISA requires companies to pre-fund DB pension obligations. Pre-funding of DB pensions protects employees who have earned the right to receive a pension, even if the firm goes out of business. Employers in the private sector pre-fund their DB pension liabilities by establishing pension trusts, which are invested in assets such as stocks and bonds. ERISA also established the Pension Benefit Guaranty Corporation (PBGC), which pays pension benefits (up to limits set in law) in the event that a company goes out of business with an underfunded pension plan. The PBGC is funded by premiums paid by employers that sponsor defined benefit pensions. It does not insure defined contribution plans.

Pre-funding DB pension benefits is consistent with the principles of accrual accounting, in which a firm's assets and liabilities are recognized in its financial records as they accrue, as opposed to waiting until cash is received or paid out. By providing for future pension liabilities as they are incurred, the firm is recognizing that the pension benefits that it must pay in the future are part of the cost of doing business today. When an employer fails to set aside enough money each year to pay the retirement benefits accrued by its workers that year, it accumulates an "unfunded liability." ERISA requires any employer that develops an unfunded liability in its defined benefit pension plan to make additional contributions over a period of years until the plan's assets equal the present value of its liabilities.

[2] Neither federal nor state and local employee pension plans are subject to ERISA. Federal employee pension plans are governed by Title 5 of *the U.S. Code*. Pensions for state and local government employees are governed by state laws.

Pre-funding of Federal Employee Pension Benefits

When the Civil Service Retirement System was established in 1920, it was not pre-funded. Benefits paid to federal retirees were paid from current contributions to the plan. Because the federal government is not likely to go out of business, it could have continued to pay the pensions earned by federal employees on a pay-as-you-go basis. Nevertheless, when Congress established the Federal Employees' Retirement System in 1986, it required all pension benefits earned under FERS to be fully pre-funded by the sum of employer and employee contributions and the interest earned by the U.S. Treasury bonds held by the Civil Service Retirement and Disability Fund. Congress required pre-funding of FERS retirement benefits so that federal agencies would have to recognize these costs in their budgets. Pre-funding promotes more efficient allocation of resources between personnel costs and other expenses because it forces federal agencies to recognize the full cost of employee compensation when they prepare their annual budget requests.

Investment of Trust Fund Assets

The assets in private-sector pension funds represent a "store of wealth" that firms can use to meet pension obligations as they come due. The CSRDF, however, is not a store of wealth for the federal government. The fund is required by law to invest exclusively in U.S. Treasury bonds. These bonds represent *budget authority*, which is the legal basis for the Treasury to disburse funds. When the CSRDF redeems the Treasury bonds that it holds, the Treasury must raise an equivalent amount of cash by collecting taxes or borrowing from the public.

If the CSRDF held assets that earned a higher average rate of return than U.S. Treasury bonds, some of the future cost of civil service retirement annuities could be paid from these higher investment returns. However, in the short run, allowing the civil service retirement trust fund to invest in private-sector securities such as corporate stocks and bonds would result in higher federal expenditures. The trust fund's two main sources of income are employee contributions and contributions from federal agencies on behalf of their employees. Employee contributions are income both to the federal government and to the trust fund. Agency contributions, however, are income to the trust fund, but they are not income to the federal government. Agency contributions to the CSRDF are *intragovernmental transfers* that have no effect on the government's annual budget deficit or surplus.

Currently, most outlays from the trust fund are benefit payments to annuitants. If the CSRDF were to purchase private-sector assets rather than U.S. Treasury bonds, an outlay from the trust fund would be required to purchase these assets. If employee contributions were used to purchase private-sector assets, they would no longer be income to the Treasury, and they would increase the federal budget deficit by the amount diverted to purchase private-sector assets. Agency contributions—currently an intragovernmental transfer—would instead be used to purchase private-sector assets and would be a new outlay of funds from the Treasury.

Over the long run, however, purchasing private-sector assets would not increase the budget deficit, and could reduce it. Outlays would be moved from the future—where they would have occurred as benefit payments—to the present, where they would occur to purchase assets. If the net rate of return on private-sector securities exceeded the rate of return on Treasury bonds, the extra investment income earned by the trust fund would reduce the amount of tax revenue that would have to be raised from the public in the future to pay pension benefits under CSRS and FERS. Such a change in policy, however, would raise important questions about the federal

government owning private-sector assets, and also could result in greater volatility in the value of the assets held by the trust funds.

Financing Retirement Annuities for Federal Employees

Under both CSRS and FERS, retirement annuities are based on (1) the employee's years of service, (2) the average of the employee's highest three consecutive years of salary, and (3) the benefit accrual rate. Workers covered by CSRS accrue benefits equal to 1.5% of pay for their first five years of service, 1.75% for the next five years, and 2.0% of pay for each year of service beyond the 10th year. Under CSRS, an employee with 30 years of service will have earned an annuity equal to 56.25% of the average of his or her highest three consecutive years of pay. Employees enrolled in FERS accrue benefits equal to 1.0% of pay for each year of service. If they have worked for the federal government for 20 or more years and retire at age 62 or older, the accrual rate under FERS is 1.1% for each year of service. After 30 years of service, an employee enrolled in FERS will have earned a pension equal to 30% of the average of his or her highest three consecutive years of pay, or 33% if the individual is 62 or older at retirement.[3]

Federal agencies pre-fund employee pensions by deferring some of their budget authority until it is needed to pay pensions to retired workers. Federal agencies defer this budget authority by transferring it to the CSRDF. The Treasury credits the fund with the appropriate amount of budget authority in the form of special-issue bonds that earn interest equal to the average rate on the Treasury's outstanding long-term debt. The CSRDF can redeem these bonds to pay pensions to retirees and survivors.

Employee Contributions

Federal employees have mandatory contributions to the CSRDF deducted from their paychecks. Employees of the executive branch who are under the CSRS contribute 7.0% of basic pay to the CSRDF. Employees under FERS currently contribute 0.8% of pay to the CSRDF.[4] They also pay 6.2% of wages to the Social Security trust fund for Old-Age, Survivors, and Disability Insurance (OASDI) under permanent law; but they currently pay 4.2% through the end of December 2012. In 2012, wages up to $110,100 are subject to the OASDI tax.[5]

[3] Under FERS, an employee who retires aged 56 or older with 30 or more years of service also receives the "FERS supplement." The supplement is equal to the Social Security benefit that the individual earned while a federal employee. The FERS supplement terminates at the age of 62, regardless of whether the person applies for Social Security.

[4] Members of Congress contribute 8.0% of salary if covered by CSRS and 1.3% if covered by FERS.

[5] Retired federal employees are eligible for Medicare at the age of 65, regardless of whether they were covered by CSRS or FERS. Employees in both programs pay the Hospital Insurance (HI) payroll tax of 1.45% on all salary and wages.

Increased Retirement Contributions for Certain FERS Employees Under P.L. 112-96

Federal employees hired (or rehired with less than five years of FERS service) after December 31, 2012, will be subject to increased contributions in accordance with P.L. 112-96 (the Middle Class Tax Relief and Job Creation Act of 2012). Regular FERS employees hired in 2013 or later will contribute 3.1% of pay to their FERS annuity in addition to Social Security contributions.[6]

Employer Contributions

Whether a federal employee is enrolled in CSRS or FERS, his or her employing agency contributes money to the CSRDF. Agency contributions differ between CSRS and FERS. The Office of Personnel Management (OPM) estimates the cost of CSRS annuities to be equal to 26.0% of employee pay. This is the amount that would have to be contributed to the CSRDF each year to fully fund the benefits that employees earn under the CSRS. Under CSRS, employees and their employing agencies each contribute an amount equal to 7.0% of pay the CSRDF. Agency and employee contributions total 14.0% of pay. The Treasury makes an annual contribution to the CSRDF that covers most of the costs of the CSRS that are not covered by employee and agency contributions. In FY2012, the Treasury will pay an estimated $32.0 billion to the CSRDF. However, the CSRS continues to have an unfunded liability, which is estimated to be $650.3 billion in FY2012.[7]

OPM estimates the cost of the FERS basic annuity and the FERS supplement to be equal to 12.7% of employee pay. The employee contribution of 0.8% of pay under FERS is equal to the difference between the CSRS contribution rate (7.0%) and the Social Security payroll tax rate (6.2%). Federal agencies are required to contribute to the CSRDF the full cost of the FERS benefits that employees earn each year, minus the employee contribution. Thus, federal agencies contribute an amount equal to 11.9% of payroll to the CSRDF for employees under FERS. FERS benefits are fully funded by employer and employee contributions and interest earnings.

Operation of the Civil Service Retirement Fund

The CSRDF is a record of the budget authority available to pay retirement and disability benefits to federal employees. Each year, the trust fund is credited by the Treasury with contributions from current employees and their employing agencies, interest on the securities held by the fund, interest on previous service for which benefits have been accrued but for which budget authority has not yet been provided, and a transfer from the general revenues of the Treasury. Only a small part of the income to the fund—mainly contributions from employees—is income to both the trust fund and to the government. The remainder of these transactions are *intragovernmental transfers* in which budget authority is transferred from federal agencies to the trust fund.

[6] Members of Congress elected after December 31, 2012 (or re-elected with less than five years of FERS service), will also contribute 3.1% of pay if covered by FERS.

[7] The cost of future cost-of-living adjustments (COLAs) paid to retirees is not covered by contributions from employees, their employing agencies, or the Treasury. As a result, the CSRS continues to accrue an unfunded liability.

Intragovernmental transfers have no effect on the size of the government's annual budget deficit or surplus.[8]

The CSRDF is similar to the Social Security trust fund in that, by law, 100% of its assets are invested in special-issue U.S. Treasury bonds or other bonds backed by the full faith and credit of the United States government. When the trust fund needs cash to pay retirement benefits, it redeems the bonds and the Treasury disburses an equivalent dollar value of payments to civil service annuitants. Because the bonds held by the trust fund are a claim on the U.S. Treasury, they ultimately are paid for by the taxpayers. According to the U.S. Office of Management and Budget (OMB), balances in the trust fund are

> available for future benefit payments and other trust fund expenditures, but only in a bookkeeping sense. The holdings of the trust funds are not assets of the Government as a whole that can be drawn down in the future to fund benefits. Instead, they are claims on the Treasury. From a cash perspective, when trust fund holdings are redeemed to authorize the payment of benefits, the Department of the Treasury finances the expenditure in the same way as any other Federal expenditure—by using current receipts or by borrowing from the public. The existence of large trust fund balances, therefore, does not, by itself, increase the Government's ability to pay benefits. Put differently, these trust fund balances are assets of the program agencies and corresponding liabilities of the Treasury, netting to zero for the Government as a whole.[9]

Financial Status of the Civil Service Retirement Fund

The Short-Term Picture

The CSRDF held a balance of $797.5 billion at the end of FY2011. (See **Table 1**.) Obligations from the fund totaled $70.6 billion in 2011, consisting mostly of annuity payments. Annuity payments totaled $70.2 billion in 2011. Payments to the estates of decedents and refunds to separating employees accounted for another $321 million. The administrative expenses of the fund were $144 million, or about 0.20% of total expenditures.

Each year, the CSRDF receives cash contributions and intragovernmental transfers. Cash contributions amounted to $4.0 billion in 2011. The largest payments into the CSRDF were contributions from federal agencies and the Postal Service on behalf of their employees, interest payments on the Treasury bonds held by the fund, and a payment from the general fund of the Treasury to make up for the insufficient funding of benefits accrued under CSRS. These payments are intragovernmental transfers. The CSRDF receives Treasury bonds as a record of available budget authority. It redeems bonds periodically as annuity payments come due.

[8] Only revenues collected from the public and outlays to the public affect the budget deficit.

[9] U.S. Office of Management and Budget, *Budget of the United States Government, Fiscal Year 2010: Analytical Perspectives* (Washington: GPO, 2009), p. 345.

Table 1. Receipts and Obligations of the Civil Service Retirement Fund, FY2011-2013

(amounts in millions)

	FY2011	FY2012 (est.)	FY2013 (est.)
Beginning balance	**$774,161**	**$797,479**	**$812,479**
Receipts to the fund			
Cash receipts:			
Employee contributions	$3,310	$3,576	$4,216
District of Columbia	$30	$23	$20
Other employee deposits	$651	$695	$747
Intragovernmental transfers:			
Agency contributions	$21,018	$20,987	$21,257
Postal Service contributions	$2,182	$3,874	$3,933
Interest on securities	$34,998	$33,546	$32,167
General fund receipts	$31,281	$31,976	$31,838
Re-employment offset	$50	$51	$52
Total receipts to the fund	**$93,994**	**$95,119**	**$94,230**
Obligations from the fund			
Employee and survivor annuities	-$70,209	-$74,342	-$77,719
Refunds and payments to estates	-$321	-$225	-$207
Administration	-$144	-$99	-$103
Transfer to Merit Systems Protection Board	$4	$4	$4
Total obligations from the fund	**-$70,676**	**-$74,669**	**-$78,031**
Ending balance	**$797,479**	**$812,479**	**$823,228**

Source: Office of Management and Budget, *Budget of the United States Government, FY2013*.

The Long-Term Picture

Table 2 presents the annual income and expenditures of the CSRDF through the year 2085, as estimated by the Office of Personnel Management. **Table 2** also shows the year-end balance of the trust fund and its estimated unfunded actuarial liability at the end of the year. The unfunded actuarial liability represents the difference between the present value of the fund's future benefit obligations and the present value of future credits to the fund plus the value of the securities it holds. The final two columns of the table show, respectively, the expenditures of the CSRDF relative to the government's total payroll expense for employee wages and salaries and CSRDF expenditures relative to the nation's annual gross domestic product (GDP).

The estimates presented in **Table 2** show the income to the CSRDF rising over the projection period from $95.2 billion in 2010 to $155.5 billion in 2025 and to about $1.2 trillion in 2085.[10] The total expenses of the fund are projected to rise more slowly, increasing from $69.3 billion in 2010 to $116.2 billion in 2025 and to $669.7 billion in 2085. Consequently, the assets held by the CSRDF also are projected to increase steadily from $784.6 billion in 2010 to about $1.3 trillion in 2025 and to $13.9 trillion in 2085. According to actuarial projections, the unfunded liability of the CSRDF will continue to rise until about 2023, when it will peak at $684.8 billion. From that point

[10] All amounts in **Table 1** and **Table 2** are expressed in nominal dollars.

onward, the unfunded liability will steadily decline and is projected to turn into a surplus of 716.7 billion by 2085.

In FY2010, expenditures from the CSRDF totaled $69.3 billion. The federal government's payroll expense for employees in 2010 was approximately $191.0 billion. Therefore, expenditures from the CSRDF were equal to about 36% of the amount paid as salaries and wages to federal employees. CSRDF expenditures are projected to decline relative to the government's wage and salary expenses, beginning around 2020. By 2085, the expenditures of the CSRDF are estimated to be equal to 23% of the government's wage and salary payments to its employees. The decline in the ratio of CSRDF outlays to salary expense after 2020 will occur mainly because future retirees will receive smaller pension benefits under FERS than they would have received under CSRS.

The final column of **Table 2** shows federal outlays for civil service pensions as a percentage of GDP. Relative to the total economic resources of the economy, the expenditures of the CSRDF are expected to remain roughly steady for the next 10 years before declining substantially from 2020 to 2085. Federal expenditures for civil service retirement annuities were estimated to equal 0.48% of GDP in 2010, down from a high of 0.55% in 1991. Between 2010 and 2020, the annual expenditures of the CSRDF are projected to remain in the range of 0.42% to 0.48% of GDP. From that point on, outlays from the CSRDF will fall steadily to about 0.16% of GDP by 2085.

Table 2. Projected Income and Expenses of the Civil Service Retirement Fund

(amounts in billions)

Fiscal Year	Total Income	Total Expenses	Assets at End of Year	Unfunded Actuarial Liability	Expenses as a Percentage of Total Payroll	Expenses as a Percentage of GDP
Actual						
2010	95.2	-69.3	784.6	622.3	36.3	0.48
Estimated						
2015	114.5	-85.1	939.6	658.2	38.9	0.46
2020	133.4	-99.5	1,103.4	679.2	37.4	0.42
2025	155.5	-116.2	1,287.6	683.9	36.1	0.40
2030	180.9	-130.9	1,515.6	664.8	33.7	0.36
2035	210.2	-144.5	1,810.0	624.3	30.8	0.31
2040	246.5	-157.9	2,204.6	560.9	28.0	0.27
2045	291.5	-174.3	2,731.5	470.1	25.8	0.24
2050	347.7	-196.4	3,417.7	349.3	24.3	0.22
2055	414.5	-227.5	4,284.8	196.1	23.4	0.20
2060	488.9	-269.7	5,315.2	41.0	23.1	0.19
2065	578.4	-323.0	6,517.1	-106.2	23.0	0.18
2070	686.3	-387.5	7,920.4	-245.2	22.9	0.18
2075	818.3	-464.6	9,574.0	-383.0	22.9	0.17
2080	979.8	-557.4	11,542.6	-534.0	22.8	0.16
2085	1,176.5	-669.7	13,901.2	-716.7	22.8	0.16

Sources: U.S. Office of Personnel Management, *Annual Report of the Board of Actuaries, Civil Service Retirement and Disability Fund, Fiscal Year Ended September 30, 2011*; Council of Economic Advisers, *Economic Report of the President, 2012*; and the 2012 *Report of the Social Security Board of Trustees.*

CSRDF expenditures will fall relative to GDP mainly as a result of the decline in the proportion of civil service annuitants who are covered by CSRS and the increase in the number who are covered by FERS. The FERS basic annuity was designed to be smaller relative to high-three average pay than a CSRS annuity because FERS annuitants also receive benefits from Social Security and the Thrift Savings Plan. Because the transition from CSRS to FERS is mandated by law, the constant-dollar value of CSRDF outlays per annuitant will decline due to the different benefit formulas between CSRS and FERS. Consequently, outlays for civil service annuities are almost certain to decline relative to GDP, even if GDP grows more slowly than is assumed in the projections displayed in **Table 2**.

The Civil Service Retirement and Disability Fund in the Federal Budget

In FY2012, the total receipts of the CSRDF are estimated to be approximately $95.1 billion, and disbursements from the fund were about $74.7 billion. Only a small part of the revenues to the fund ($4.3 billion) this year were cash receipts. The remainder consisted of budget authority transferred from other federal agencies. The cash receipts of the fund come primarily from the contributions of federal employees toward their future retirement benefits. Other cash income to the fund comes from payments made by the District of Columbia on behalf of its employees covered by CSRS or FERS. Cash payments into the CSRDF are income to both the U.S. government and to the trust fund. These cash receipts reduce the government's budget deficit. Benefit payments to retirees and survivors are cash outlays of the federal government.

Most of the payments into the CSRDF—$90.4 billion in 2012—are intragovernmental transfers. These transactions are income to the fund, but they are not income to the U.S. government. Intragovernmental transactions rarely involve cash. They do not affect the government's budget deficit or surplus because no money is received or spent by the government. Cash is rarely involved in intragovernmental transfers because individual government agencies, in general, have no cash to spend.[11] What Congress appropriates to federal agencies each year is *budget authority*. Budget authority is legal permission for an agency to spend money from the accounts of the U.S. Treasury. The Treasury takes in money from the public by collecting taxes and by borrowing, and in most cases it is only the Treasury that disburses cash to the public.

It has been suggested from time to time that the Civil Service Retirement and Disability Fund should be taken "off budget," as has already been done with Social Security. Taking an account off budget means that its income and expenditures are not included in calculations of the government's annual budget surplus or deficit. Off-budget accounts are portrayed separately in the budget documents prepared by the Office of Management and Budget and the Congressional Budget Office (CBO). However, both OMB and CBO also publish *unified budget accounts* that include Social Security and other programs that are off budget. This is done because taking an account off budget does not end the activity or remove its effects from the U.S. economy. Whether Social Security—or civil service retirement—is on-budget or off-budget, it still collects

[11] Some federal agencies collect "user fees" or other payments from the public, but the cash receipts of federal agencies are trivial in comparison to the size of the federal budget. The majority of the government's cash transactions with the public—collecting taxes, purchasing goods and services, paying federal employee salaries, and disbursing Social Security benefits, government pensions, and cash welfare—are conducted by the Treasury.

revenues from the public, pays benefits to the public, and affects the nation's financial markets by influencing the amount of private capital that is absorbed by government borrowing.

Taking the civil service trust fund off-budget would not affect the government's revenues or outlays in the unified budget accounts, but it would affect the size of the budget deficit or surplus as portrayed in any budget documents that excluded the CSRDF. For example, employee contributions to CSRS and FERS that are now counted as revenue to the Treasury would not be treated as revenue if they were paid to an off-budget CSRDF. The money that federal agencies now send to the trust fund in the form of intragovernmental transfers would instead be recorded as outlays, and would therefore increase the government's reported budget deficit or reduce the budget surplus in the year that the transfer occurs rather than in the future when benefits are paid. The outlays made by the fund to pay civil service annuitants would not appear at all in the federal budget. The net effect of these changes if the CSRDF had been off-budget in 2011 would have been an increase of about $23 billion in the government's reported budget deficit, even though the amount of money collected from the public and the amount of money paid to civil service annuitants would have been no different than under current law.

One purpose of the federal budget is to show whether the government's revenues and outlays are in balance or out of balance. Therefore, taking any account off-budget distorts the picture of the government's fiscal condition. It is for this reason that financial analysts and economists focus almost exclusively on the unified budget totals when evaluating the effect of the federal budget on the nation's financial markets and the economy. If "outlays" were to include amounts not actually paid from the Treasury in the current year (as would be the case if the CSRDF were off-budget), then no revenue from the public would be needed in that year to pay for them. In years of budget deficits, some of the deficit would require borrowing from the public, and some of it would not. In years of modest budget surplus, there might appear to be a deficit because transfers to an off-budget account would be recorded as outlays, even though they do not involve payments from the Treasury to the public. For these reasons, taking the CSRDF off-budget might lead to greater confusion about the size of the real budget deficit or surplus, as has been the case with the off-budget status of Social Security.

Civil Service Retirement: Funding and Accounting Issues

Accounting for Pension Costs Under CSRS and FERS

Actuaries use a concept called "normal cost" to estimate the amount of money that must be set aside each year from employer and employee contributions to pre-fund pension benefits. Normal cost is usually expressed as a percentage of payroll. There are two measures of normal cost: static and dynamic.

- *Static normal cost* is the amount, expressed as a percentage of payroll, that must be set aside each year to fund pension benefits based on current employee pay with no future pay raises, no future COLAs for retirees, and a fixed rate of interest.
- *Dynamic normal cost* is the amount, expressed as a percentage of payroll, that must be set aside each year to fully fund pension benefits for workers who will

> continue to accrue new benefits, including the effects of employee pay raises, post-retirement COLAs, and changes in the rate of interest.[12]

By law, the FERS basic retirement annuity and FERS supplement must be pre-funded according to its dynamic normal cost. Every year, OPM estimates the dynamic normal cost of FERS retirement annuities for employees entering the federal work force that year. For each group of new employees, OPM must estimate average job tenure, turnover, future salaries, age at retirement, rates of disability, death rates, the number of employees who will become annuitants, and how many will leave surviving dependents. OPM periodically re-estimates the dynamic normal cost of FERS to reflect anticipated changes in interest rates, inflation, and employee and retiree demographic characteristics.

OPM has estimated the normal cost of the FERS basic retirement annuity at 12.7% of payroll. Employee contributions were set in law at 0.8% of pay, so the contributions of federal agencies are equal to 11.9% of basic pay. If the assumptions underlying these cost estimates prove to be accurate, FERS will be "fully funded."[13] OPM has estimated the dynamic normal cost of CSRS, using the same economic assumptions used in FERS, at 26.0% of payroll. The financing of CSRS has at times been a topic of controversy, however, because it is *not* funded according to its dynamic normal cost. CSRS is funded through a combination of employee and agency contributions that together are equal to the static normal cost of CSRS, along with contributions from the general fund of the U.S. Treasury that make up some of the difference between the static normal cost of CSRS and its dynamic normal cost.

Why Are CSRS Revenues Less Than the Present Value of Benefits?

At the time that Congress established the CSRS in 1920, it set up a trust fund from which benefits would be paid. From the beginning, however, CSRS was funded on a "pay-as-you-go" basis. The trust fund was used to pay benefits to already-retired workers, rather than to pre-fund the pension benefits of current workers. Initially, only employees made regular payroll contributions to the fund. Regularly scheduled agency contributions were not mandated until the 1950s. For many years, there were so few federal retirees that the fund was able to meet its financial obligations to beneficiaries from employee contributions alone.

In 1956, Congress passed P.L. 84-854, which required federal agencies to make contributions to the Civil Service Retirement Trust Fund on behalf of their eligible employees. The contributions made by federal agencies were equal in amount to the money paid into the fund by their employees, and were made from appropriations that agencies received specifically for this purpose. Even with regular contributions from the employing agencies, however, the CSRS was still being funded on a pay-as-you-go basis. Contributions to the fund were sufficient to meet *current* benefit obligations but not to *pre-fund* the future retirement benefits of federal employees.

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[12] Interest rates must be projected because the normal cost is computed as a present value. Expressed in absolute terms, rather than as a percentage of payroll, the normal cost of a pension plan is the amount of money that would have to be invested at a given rate of return to pay future pension obligations, including increases in pension costs that will result from employee pay raises and retiree cost-of-living adjustments (COLAs).

[13] If the amount set aside each year proves to be insufficient (due to inaccurate assumptions about pay raises, interest rates, the rate of inflation, or other variables) the shortfall would be made up from the general revenues of the U.S. Treasury. See 5 U.S.C. §8423(a)(4).

As the federal civil service pension system matured (that is, as the ratio of annuitants to workers began to rise), it became necessary to establish a formal system of accounting for the pension obligations that had been incurred by the federal government but for which funds had not yet been set aside. In response to this need, Congress enacted P.L. 91-93 in 1969. This law set the employee contribution to CSRS at 7.0% of pay and required an equal amount to be contributed from funds appropriated to federal agencies. This amount (equal to 14.0% of payroll) represented the total contribution required to pay the costs of pension liabilities accrued by federal employees, using "static" assumptions: no future pay increases, no COLAs, and a 5.0% annual rate of return on the securities in the Civil Service Retirement and Disability Fund. Agency and employee contributions under CSRS have remained at the same percentage of payroll since 1969.

P.L. 91-93 also requires three payments to be made annually from the general revenues of the U.S. Treasury into the CSRDF. These payments are

- the amount necessary to amortize (pay off with interest) over a 30-year period any increase in pension liability that results from pay increases (but not retiree COLAs) or from bringing newly covered groups of workers into the CSRS;
- the amount of the employer's share of the cost of benefits attributable to military service; and
- interest, fixed at a rate of 5%, on the estimated amount of the previously accrued liabilities of the CSRS for which contributions have not yet been made to the fund.[14]

Thus, while the static costs of the CSRS were shared equally between federal employees and their employing agencies, the Treasury was given responsibility for pension liabilities that are not part of the pension system's static normal costs. By including the 30-year amortized cost of pay raises in the annual transfer from the general fund, the Treasury assumed the additional pension expenses that result from pay raises.[15] All costs of the CSRS that are not paid by employee and agency contributions or through the transfers to the CSRDF mandated by P.L. 91-93 ultimately will be paid from the general revenues of the Treasury. The costs of retiree COLAs, which also are not part of the static normal cost of the CSRS, are not included in the annual transfer from the Treasury to the CSRDF, and ultimately will be paid from the general fund of the Treasury.

Because the full costs of CSRS are not met by the combined total of employee contributions, agency contributions, interest earnings, and the supplemental payments from the Treasury, some future CSRS benefits will of necessity be paid from contributions that were made to the CSRDF on behalf of employees who are enrolled in FERS. This will create an unfunded liability for FERS, which will be paid off through a new series of 30-year amortization payments from the general fund of the Treasury to the CSRDF. As stated by OPM:

> In this projection, the CSRS assets attributable to non-Postal employees are depleted by the year 2022. Since the CSRS benefits continue to be paid from the assets of the CSRDF, the

[14] Although this law mandated interest payments on the accrued CSRS liability to be made from the Treasury to the CSRDF at the fixed rate of 5%, it did not provide for amortizing the accumulated liability.

[15] Pay raises affect pension costs because the CSRS annuity is based on a worker's high-three average pay. The effect of pay raises on future CSRS pension costs is met by amortizing them over a 30-year period with payments from the U.S. Treasury. Because the cost of COLAs is not accounted for in the payments to the trust fund mandated by the 1969 law, the CSRS continues to accumulate an unfunded liability attributable to retiree COLAs.

> assets attributable to non-Postal FERS employees will be reduced each year by the amount that the non-Postal CSRS benefits exceed the non-Postal CSRS contributions. This will cause an increase in the supplemental liability under FERS each year, which must then be amortized by a new series of 30-year payments under FERS to be made by the Treasury.[16]

Current law specifies that funds that were paid into the CSRDF on behalf of employees covered by FERS will be used to pay the unfunded liability of CSRS. FERS will then be reimbursed by a series of payments with interest from the general fund of the Treasury to the CSRDF.

Accounting Issues Raised by the Way CSRS Benefits Are Financed

Actuarial estimates indicate that the unfunded liability of the CSRS does not pose a threat to the solvency of the Civil Service Retirement and Disability Fund. In its annual report, OPM has stated that "the total assets of the CSRDF, including both CSRS and FERS, continue to grow throughout the term of the projection, and ultimately reach a level of over 4.7 times payroll, or nearly 20 times the level of annual benefit outlays."[17] Nevertheless, the current method of funding the CSRS has in recent years been a source of debate for at least two reasons:

> (1) Because employee and government contributions do not account for the full actuarial cost of CSRS pension obligations as they accrue each year, the CSRS continues to accumulate additional unfunded liabilities. Consequently, some of the pension costs that are incurred each year will not be reflected in the government's budget until those benefits are paid at some time in the future. Some budget experts argue that these costs should be accounted for in each agency's budget as they accrue, just as is done in the FERS.
>
> (2) The supplemental payments to the trust fund that are required by the 1969 law come from the general revenues of the Treasury rather from the budgets of the various federal agencies where these costs are incurred. As a result, the amount of employee compensation for which agencies must account in their budgets each year understates the full costs of employment.[18] Critics say that this contributes to an inefficient allocation of resources in the federal government by making labor costs appear lower than they really are.

If agencies were required to fully fund the current and future costs of the CSRS through increased contributions, they could do so from their current-law appropriations or they could be granted additional budget authority for this purpose. The two approaches would have different effects on the federal budget. For agencies to be held harmless for the increased contributions, they would have to receive additional appropriations to their salary and expense accounts.[19] Because agencies would transfer the appropriated funds to the CSRDF, which would in turn use them to purchase Treasury bonds, no additional outlays would occur as a result of these appropriations, and they would not effect the federal budget deficit or surplus. The outlays would occur in the future when retired employees collect their CSRS annuities, just as under current law.

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[16] U.S. Office of Personnel Management, *Annual Report of the Board of Actuaries, Civil Service Retirement and Disability Fund, Report for the Fiscal Year Ended September 30, 2011*, p. 18.

[17] Ibid, p. 18.

[18] This transfer of funds to the CSRDF from the Treasury is included in the federal budget in the account for OPM.

[19] This was proposed in the *Budget of the United States, FY1996*, but was not enacted.

An alternative means of fully financing the normal cost of the CSRS would be to require agencies to increase their contributions to the CSRDF without receiving any additional appropriations to their salary and expense accounts.[20] Pre-funding the full costs of the CSRS in this way would reduce the federal budget deficit, because the outlays of each agency would have to be cut by the amount of its additional transfers to the CSRDF. Outlays to CSRS annuitants would still occur in the future just as under current law. However, these future outlays would be offset by a reduction in current outlays so that the future payments to CSRS annuitants could be fully pre-funded. The reduction in resources available for current spending, however, would force federal agencies to cut spending elsewhere in their budgets.

Paying the full normal cost of CSRS through employee and agency contributions would prevent the system from accruing additional unfunded liabilities, but it would not reduce the previously accumulated liability of the CSRS. Under current law, this liability will be paid off eventually through a series of 30-year amortization payments from the general fund of the Treasury to the CSRDF. Some observers favor starting these amortization payments sooner. They note that private-sector employers are required by ERISA to begin paying down accumulated liabilities when they occur. Others advocate paying down the liability now as a way to forestall proposals calling for reduced pension benefits or increased employee contributions in the future.

Conclusion

Proposals to pre-fund CSRS in the same manner as required under FERS have foundered either on the question of whether additional budget authority should be granted to federal agencies, or whether they should make higher contributions from their current budget authority. Many policymakers believe that greater pre-funding of CSRS retirement annuities would lead to improved accounting of personnel costs among federal agencies. However, CSRS has been closed to new enrollment since 1984, and the percentage of federal employees enrolled in CSRS is declining rapidly as these workers retire. In 2011, fewer than one-sixth of federal employees were enrolled in CSRS. With the proportion of federal employees enrolled in CSRS declining each year, the budgetary treatment of government contributions toward their retirement annuities is becoming a less pressing issue.

Some observers have suggested that investing the civil service trust fund entirely in U.S. Treasury bonds does not represent true "pre-funding" of CSRS and FERS annuities because these bonds are merely a claim held by the government against its own future revenues. They suggest that at least part of the trust fund's assets should be invested in private-sector stocks and bonds where they could earn a higher rate of return than is available from U.S. Treasury securities (albeit at greater risk). In addition to issues of investment risk, however, this proposal would raise questions about how purchases of private-sector assets would be scored under current budget rules, and also whether it would be appropriate for federal trust funds to own the stocks and bonds of private-sector companies.

[20] This was proposed in the FY1997 *Budget of the United States*, but was not enacted by Congress.

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