In 1987, the federal government adopted a new retirement system for civil service workers. All employees hired since 1984 were placed under the new system, called the Federal Employees Retirement System (FERS), while existing employees remained under the old system, called the Civil Service Retirement System (CSRS).

CSRS is a defined benefit retirement plan in which the employee's retirement benefits depend on earnings and years of service (YOS). Because CSRS was begun in the 1920s before the advent of Social Security, employees covered by CSRS were not covered by the Social Security system. FERS differs from CSRS in fundamental ways. It includes not only a less generous defined benefit plan called the “Basic Plan,” but also Social Security coverage and a defined contribution plan called the Thrift Savings Plan (TSP). Under the TSP, employees make contributions to the plan that are matched to some extent by the government. These contributions are invested, and the value of the employee’s retirement benefit under the TSP depends on how the investment fund performs over time.

The adoption of FERS was in part motivated by the fundamental changes that were made to the Social Security system in the early 1980s. An important goal of policymakers in designing FERS was to include federal civil service workers in the Social Security system. First, policymakers wanted to address the perceived inequity caused by the lack of Social Security coverage for these workers. Second, they wanted to address a “double dipping” problem. Highly paid individuals could leave the civil service and work in the Social Security–covered sector sufficiently long to accumulate the minimum 40 quarters needed to qualify for Social Security benefits. Because of the progressive nature of the Social Security benefit formula, these work-

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1A detailed description of CSRS and FERS is given in Appendix A.
2See Appendix A for the matching rates.
3Between 1987 and 1988, the federal government allowed those covered by CSRS and who left the civil service but were rehired after 1984 and had more than 5 years of service as of December 31, 1986, or as of the last break in coverage, and at least one day of CSRS coverage the opportunity to switch to FERS within 6 months of their rehire date (as long as the new appointment is not excluded by law or regulation). If excluded, the employee would be covered by Federal Insurance Contributions Act (FICA) only. Those who opt not to switch to FERS when they return are covered by a system called CSRS-Offset. CSRS-Offset consists of two parts: CSRS and Social Security. Because of the enormous growth in the returns to TSP funds invested in the stock market since the early 1990s, pressure mounted on Congress in 1997 to open a conversion window yet again to give CSRS employees another opportunity to switch to FERS. Consequently, a six-month conversion window was open to existing CSRS-covered personnel in 1998.
ers could get higher benefits than they would have received had they worked their entire careers in covered Social Security employment. This problem was addressed by including Social Security in FERS and by creating the windfall elimination provision for those covered by CSRS. Under this provision, the employee’s Social Security benefits are reduced by up to 40 percent of his or her CSRS benefits.

FERS was also adopted to address the substantial unfunded liability that CSRS generated (General Accounting Office (GAO), 1998). CSRS is funded from contributions of 14 percent of payroll—7 percent each from the employee and from the employing agency, but these payments are inadequate to cover the current (and future) liability of the system. Estimates of the unfunded liability vary, but they indicate that for the system to be self-financing, the percentage of an employee’s salary that must be put aside for each year of service (i.e., the “normal cost”) would have to be over 25 percent, rather than the current 14 percent (GAO, 1998; Leonard, 1985). Under FERS, the current CSRS unfunded liability would still exist, but no additional unfunded liability would be created by the hiring of new employees because the TSP does not generate an unfunded liability.

In addition to the problems of Social Security coverage and cost, several observers have suggested that CSRS also might produce undesirable retention and retirement behavior (Congressional Budget Office, 1986; Johnston, 1988; General Accounting Office, 1990; Mace and Yoder, 1995; Office of the Secretary of Defense (OSD), 1997). Some of these observers hypothesized that FERS would address these problems by changing the separation and retirement incentives of civil service personnel.

More specifically, CSRS has been thought to create “golden handcuffs,” meaning that it imposes a substantial cost to those leaving in their mid- or late careers. CSRS allows deferred retirements only at age 62. In addition, CSRS benefits are based on the employee’s highest three years’ average salary and are not protected from any erosion of benefits from inflation that may occur between the dates of separation and retirement. Consequently, those who leave prior to becoming retirement eligible substantially reduce the discounted present value (DPV) of their future retirement benefits. This penalty for leaving before a retirement-eligible age seemed to explain what was viewed as excessively low turnover among mid- and late-career personnel covered by CSRS.

From a personnel management standpoint, insufficient turnover among mid-career and senior personnel can prevent the hiring of younger personnel into the civil service and the associated rejuvenation of the workforce (Asch and Warner, 1994). Golden handcuffs are also a problem when those who stay excessively long block the

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4. The contribution rate will rise in 1999–2002, as discussed in Appendix A.
5. In establishing FERS, Congress made a deliberate trade-off: increased charges to annual FERS expenditures for adding to the long-term CSRS retirement fund liability. In doing so, Congress has placed a new risk on the employees covered by FERS—their fund accumulations or the return on the accumulations might fall.
6. While not always true, the employee’s highest three years’ salary is usually the final three years’ salary. Also, since CSRS offers those with more than one year of service and fewer than five YOS the option to cash out their contributions with interest if they leave, CSRS offers some inflation protection to these individuals.
promotion opportunities and therefore the efforts and retention incentives for more-junior personnel. It is also a problem in high-skill jobs if those who are locked into civil service employment do not possess adequate skills or supply sufficient effort.

It is possible that FERS increases turnover and separation rates among mid-careerists and those nearing retirement age. Since those who separate under FERS could continue to earn an average return from the TSP, which tends to protect the fund from the erosive effects of inflation, and could continue to accumulate Social Security benefits in other covered employment, and since FERS allows for deferred retirements at younger ages, FERS may address the golden-handcuff problem associated with CSRS.

At the same time that CSRS seemed to create golden handcuffs for mid- and late-career personnel, it seemed to some observers to induce excessive retirement at the first normal retirement-eligible age. For example, individuals covered by CSRS with 30 YOS tend to retire at age 55 when they are first eligible, rather than wait to retire at later ages. The exodus of personnel at the first retirement-eligible point is problematic when there are some occupational areas or groups of workers whom the civil service would prefer to retire later, ex post. For example, finding qualified replacements for senior personnel in managerial positions who retire at age 55 can be costly and difficult. By introducing FERS, it was thought that the reward to highly skilled senior leaders of postponing their retirement beyond their first retirement-eligible age would be increased (or the penalty reduced).

Despite the suggestion that FERS produces greater separation incentives among mid-career and senior personnel and more deferred retirements among retirement-eligible personnel, little is actually known about the separation and retirement incentives embedded in FERS compared with those in CSRS. Also, little is known empirically about how separation outcomes differ under FERS compared with those under CSRS for similar groups of workers. The research presented in this report attempts to fill this gap. We assess the separation and retirement incentives embedded in FERS compared with those in CSRS to determine whether they are consistent with prevailing hypotheses about the separation and retirement incentives embedded in FERS. In addition, given that CSRS employees had an open enrollment season between July 1, 1998, and December 31, 1998, when they could have switched to FERS, it is of interest also to address the question of which personnel had an incentive to switch. Civil service employees also had the option to switch to FERS after FERS became operational in 1987. More specifically, we address the following questions:

1. Which system is more generous in terms of increasing expected net lifetime wealth: FERS or CSRS?

2. What are the retirement age incentives embedded in each system? Do those covered by FERS have an incentive to retire at later ages than those covered by CSRS?

3. Are separation incentives for mid-career and senior personnel stronger under FERS than under CSRS? Do we observe higher separation rates among early and mid-careerists who are under FERS than for those under CSRS?
4. Who is better off financially by switching to FERS: New hires, mid-careerists, or senior personnel?

To address these questions, we do simulations of the expected net lifetime earnings and retirement wealth that an employee would accumulate at each leaving age under FERS compared with each under CSRS. We then use this information to make inferences about the retirement and separation incentives embedded in each system. We use a simulation approach because we cannot learn much about lifetime retirement and separation incentives under FERS compared with those under CSRS by looking at actual data on those under each system. Since FERS has been in existence only since 1987 and covers those who entered since 1984, insufficient time has passed for an individual to have actually spent an entire work life and retired under FERS.

In addition to the simulation analysis, we also analyze time-series cross-sectional data on Department of Defense (DoD) civil service personnel. Since FERS has not been around long enough for someone to have spent a whole career in the civil service and retire under FERS, we limit the scope of the empirical analysis to examining differences in separation rates among those in their early and mid-careers.

The report is organized as follows. Chapter Two discusses how we simulate the expected net lifetime wealth under FERS compared with that under CSRS and how we infer separation and retirement incentives. Chapter Three presents the simulation results. In Chapter Four, we discuss the data we use, some confounding factors in our data analysis, and our empirical approach. Chapter Five presents our empirical findings. We summarize our findings and discuss policy implications in Chapter Six. The appendixes provide a summary of FERS and CSRS; a discussion about inconsistencies in DoD civilian personnel files regarding YOS; and variable definitions, descriptive statistics, and regression results.