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Options for Federal Civil Service Retirement: An Analysis of Costs and Benefit Provisions

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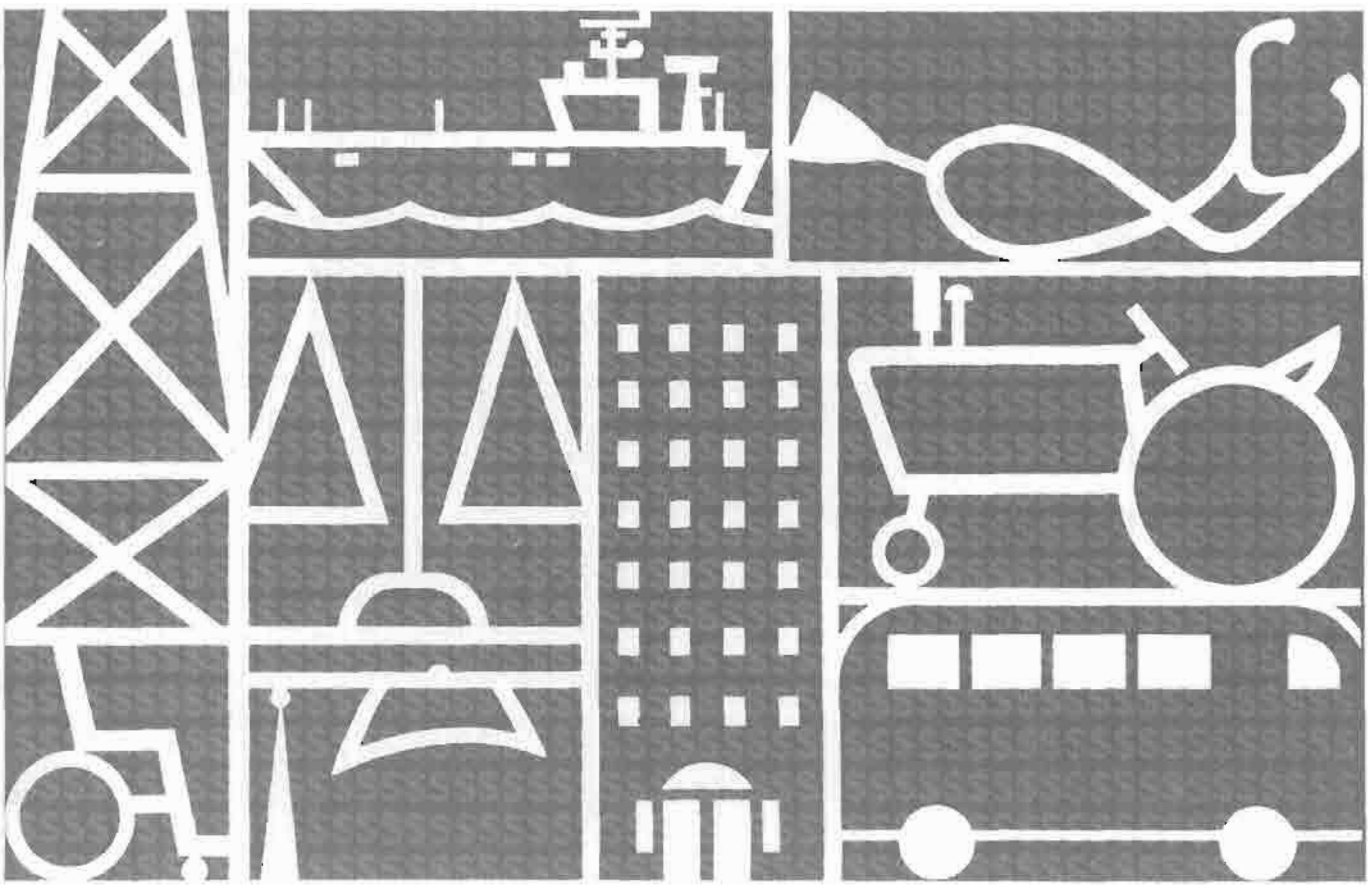

Congressional Budget Office
Congress of the United States

OPTIONS FOR FEDERAL CIVIL SERVICE RETIREMENT:

AN ANALYSIS OF COSTS AND BENEFIT PROVISIONS

The Congress of the United States

Congressional Budget Office

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PREFACE

This report is intended to provide the Congress with an analytical basis for assessing the cost of both the current civil service retirement program and future budgetary options. The study, which was undertaken at the request of the House Budget Committee, is especially timely in light of various studies of pension programs now underway within the Executive Branch. In keeping with the Congressional Budget Office's mandate to provide objective and nonpartisan information, the report contains no recommendations.

The paper was prepared by Earl A. Armbrust and David M. Delquadro of the General Government Management Staff of CBO's Office of Intergovernmental Relations, under the general supervision of Stanley L. Greigg. The authors gratefully acknowledge the special assistance provided by Donald G. Deloney, Sherri Kaplan, Susan Leverone, and Carol Phillips. The paper was edited by Marion F. Houstoun. Beverly Davidson, Shirley Hornbuckle and Monica Terlesky typed the various drafts: Norma Leake prepared the paper for publication.

Alice M. Rivlin
Director

December 1978

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SUMMARY

As retirement benefits and the average age of the population increase, public attention has focused on the future costs of pension plans and social security. In particular, concern has mounted that the cost of the civil service retirement (CSR) system may be placing an undue burden on present and future taxpayers. This paper provides an analytic framework for discussion of the future of the CSR system by comparing its cost and benefits with those in the private sector.

Proponents of the current program believe the CSR system should set an example rather than be patterned after prevailing practices in private industry. But critics of CSR believe that civil service retirement is too expensive because its provisions are generally more liberal than those commonly available in the private sector. CSR provisions of particular concern include:

- Full retirement benefits as early as age 55 after 30 years of service;
- Liberal eligibility requirements for receiving disability benefits; and
- Automatic adjustment of benefits for changes in the cost-of-living, which provides 100 percent indexation and has substantial budgetary cost.

Some 2.7 million federal civilian employees are currently covered by CSR. This system, which was established more than a decade before social security, includes age retirement, disability, and survivor benefits. Today, CSR remains independent of social security and is generally viewed as a substitute for both that program and an employer-provided retirement plan. Thus, CSR benefits, based on salary and years of government service, are intended to provide "adequate" income during retired years.

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Social security, on the other hand, provides only a financial cushion for retirees: it was not designed to be the sole source of retirement income. Employer-provided retirement plans in the private sector were thus established to augment social security benefits. Today, about half of the workforce covered by social security also participate in private pension programs. The private pension is normally "integrated" with social security; that is, private pension benefits reflect the proportion of social security benefits funded by the employer. 1/

CSR COMPARED WITH PRIVATE RETIREMENT PRACTICES

In order to compare the benefits provided by, and the associated costs of, federal and private retirement systems, it was necessary to identify the major features of CSR, social security, and a representative private pension plan. The provisions for both CSR and social security are based on current law as of October 1978. 2/ The representative private pension plan reflects retirement practices of 448 companies, which together employed a total of 5 million workers in 1977. 3/

The costs of retirement systems with different benefit structures can be compared by estimating the cost of their future benefits as a level percentage of salary while employed--referred to as "entry age normal cost." According to this measure, the cost of the current CSR system is 23.5 percent of pay--or more

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1/ Total contributions to social security are equally distributed between employees and employers.

2/ For comparative purposes, the Federal Employees Group Life Insurance Program is included as part of the CSR system and the health insurance aspects of social security coverage are excluded.

3/ The primary source of private pension plan data is the 1977 Non-Cash Compensation Survey conducted by Hay Associates.

than one and a half times what the normal cost would be if social security and a representative private sector plan were provided to federal white-collar employees. 4/

The net cost to the government as employer is the difference between normal cost and the federal employee's contribution, which is currently 7.9 percent of pay (7.0 percent for retirement and 0.9 percent for life insurance). If federal civilians were covered by social security and a representative private plan, the net cost to the government would be reduced from its current cost of 15.6 percent of pay to 9.4 percent. Based on the fiscal year 1980 payroll estimate of employees participating in the CSR system, this 6.2 percentage point difference is equivalent to about $3.1 billion per year.

This difference in normal cost results from significant variation between civil service and private retirement practices, including their level of benefits, provisions for early retirement, disability provisions, employee contributions, and cost-of-living adjustments.

Level of Retirement Benefits

The amount of a federal employee's civil service annuity is determined by the individual's average salary for the three years of his highest earnings (referred to as "high three") and by his total years of government service, including military. The annuity, as a percentage of high three salary, increases with the length of government service--16.25 percent after 10 years and an additional 2 percentage points per year thereafter. A maximum of 80 percent may be attained after 41 years and 10 months of service.

A representative plan in the private sector provides an annuity based on average salary for the five highest years of earnings. The formula is 1.5 percent of average salary for each year of employment. The resulting annuity is offset by 50

4/ An actuarial firm, Hay Associates, was retained by CBO to calculate the normal cost of the current CSR system and alternatives to it. The Hay estimates of the current system are 5.5 percentage points lower than the estimate used by the Office of Management and Budget (OMB).

percent of the primary social security benefit. Unlike CSR, the representative plan has no maximum and does not allow credit for military service prior to company employment.

Early Retirement

Early retirement benefits for federal employees are much more liberal than those provided in the private sector. Under CSR provisions, an employee can retire without a reduction in benefits as early as age 55, if he has 30 years of federal service. Private pension plans are usually based on a normal retirement age of 65. Although private pension plans often provide for earlier retirement, the benefits are substantially reduced to reflect the longer pay-out period.

Since social security may not be received (even at a reduced level) until age 62, it also influences the retirement age in the private sector. About 80 percent of male retirements under private plans occur at age 62 or after, as compared with 36 percent for male civil servants. If CSR adopted private plan provisions for early retirement, federal employees could face a 37.5 percent reduction in earned benefits for retirement at age 55. For example, an annual pension of $15,000 would be reduced to $9,375.

Disability Benefits

Eligibility for long-term disability is considerably more liberal under CSR than in the private sector. The CSR disability rate for males age 30 through 50 is at least 50 percent greater than it would be if private standards were adopted. Nevertheless, the size of the CSR disability pension is smaller than it would be under private industry provisions. Disability benefits in the private sector are provided through long-term disability insurance (LTD) in combination with social security. Unlike CSR benefits, social security may be increased by as much as 75 percent for additional dependents. If a federal employee earning $25,200 per annum were awarded disability in 1979 after 23 years of service, he would receive benefits amounting to 40 percent of final pay, regardless of how many dependents he had to support.

If, however, he received disability benefits under an LTD plan with social security, his before-tax income, assuming he had two or more dependents, would total 73 percent of gross salary. Benefits for federal employees awarded disability in 1976 averaged 43 percent of final annual salary.

Employee Contributions

The CSR system collects a mandatory employee contribution of 7.0 percent of pay, which is matched by an equal amount from the employing federal agency. Thus, it is commonly believed that CSR costs are shared fifty-fifty between employee and employer. In reality, however, employee contributions are estimated to cover about one-third of the 21.9 percent normal cost of CSR, if life insurance is excluded.

Since the federal life insurance program is contributory, the total federal employee contribution averages 7.9 percent of pay. The dominant practice in the private sector, however, is for both retirement and life insurance plans to be noncontributory, except for social security taxes and private disability insurance. If private sector practices were adopted and the future increases in social security withholdings are taken into account, federal employee contributions would be reduced by about 2.1 percentage points of pay.

Cost-of-Living Adjustments (COLA)

In the private sector, the method and extent to which an employee is protected against inflation after retirement varies widely. Among private pension plans, only 3 percent have explicit indexation provisions, 60 percent make cost-of-living adjustments on an ad hoc basis, and 37 percent do not grant any COLA increases. If social security and a representative private pension plan were adopted, the federal retiree would receive cost-of-living adjustments covering about 70 percent of increases in the Consumer Price Index. Over a 10-year period, this would result in an estimated 16 percent reduction in purchasing power, assuming a 6 percent annual rate of inflation.

FUTURE CSR OUTLAYS UNDER THE CURRENT SYSTEM

Even though CSR outlays are largely uncontrollable, substantial budget reductions could result from legislative changes in the current program. If the current CSR program is continued, CSR outlays are projected to reach $13.7 billion in fiscal year 1980, and $194 billion by the year 2015. These increases are attributable mainly to pay raises and cost-of-living adjustments. Inflation, of course, will increase the cost of all government programs. As measured in 1980 dollars, the CSR outlays would be $35.7 billion in the year 2015.

ALTERNATIVES TO THE CURRENT CSR SYSTEM

The following possible alternatives to the current CSR system address the question of reducing the future cost of CSR by making that system more comparable to retirement practices in the private sector. Options II through V would maintain CSR's independence from social security but modify current benefit provisions. Option VI, the most far-reaching approach, would provide social security and representative private pension benefits to federal civilian employees.

Option I: Continue the Current System

If the current CSR program is continued, the after-tax income of a hypothetical civil service retiree would continue to be 76 percent of net income (before retirement and after taxes), as compared with 63 percent available from a combination of a private pension and social security. 5/ Long-term estimated retirement cost to the government would remain at 15.6 percent of pay (see Summary Table 1).

Option II: Reduce Early Retirement Benefits by Adopting Private Plan Provisions

Under this option, employees retiring between ages 55 and 65 would have their benefits reduced to reflect a longer pay-out

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5/ The hypothetical civil servant is assumed to retire at age 62 after 4 years of military service and 30 years of civilian employment. The example assumes the individual has a final salary of $25,200, has a working spouse, and files a separate tax return on 1977 rates.

SUMMARY TABLE 1. COMPARISON OF CIVIL SERVICE RETIREMENT ALTERNATIVES ON THE BASIS OF NORMAL COST ESTIMATES a/

	Level Percent of Pay While Employed		
	Total	Employee Contributions	Cost to Government
Option I: Current System	23.5	7.9	15.6
Option II: Reduction of Early Retirement Benefits	21.9	7.9	14.0
Option III: Stricter Disability Eligibility and Improved Benefits	23.5	7.9	15.6
Option IV: Reduction of Cost-of-Living Adjustments	21.0	7.9	13.1
Option V: Increased Employee Contributions	23.5	14.1	9.4
Option VI: Social Security and Representative Private Pension Benefits	15.2	5.8	9.4

a/ The normal cost estimates assume an annual rate of 4 percent inflation, 5.5 percent annual pay adjustments, a 6.5 percent annual return on investment, and an average of 2 years military service for future male retirees.

period. For example, benefits would be reduced by 10.5 percent for those retiring at age 62 and by 37.5 percent if they elected to retire at age 55. Reducing annuities for early retirement would delay retirement for a significant number of federal employees. This option would reduce the long-term cost to government by about 1.6 percentage points of pay. Cumulative outlays over the first five years would be reduced by some $3.8 billion, as compared with the current system.

Option III: Adopt Stricter Eligibility Standards and Improve Benefits for Long-Term Disability

By adopting social security standards, this option would result in stricter criteria for determining disability. Benefits for workers meeting these criteria, however, would be increased to approximate those provided by social security in combination with a typical company plan. Option III would have little impact on normal cost. Outlays would be about $30 million lower in 1980, and $260 million lower in 1989. The cumulative impact over the first five years would reduce outlays by some $740 million.

Option IV: Limit Cost-of-Living Adjustments to 70 Percent of Increases in the Consumer Price Index

This option offers an easy approach to comparability with the private sector. The change would affect only the size of future annuity adjustments for both current and new retirees. Initial benefits at the time of retirement would remain unchanged. Option IV would both lower the cost to the government by 2.5 percentage points of pay and greatly reduce budget outlays. A cumulative outlay reduction of $3.9 billion would be realized over the first five years.

Option V: Increase the Federal Employee Contribution Rate for Retirement and Life Insurance from 7.9 to 14.1 Percent of Pay

This alternative recognizes that differences exist between civil service and private sector retirement but that the cost to the government for retirement should be no more--nor less--than it would be for social security and a representative private plan. Option V would reduce the cost to the government from 15.6 percent of annual payroll to 9.4 percent. The 6.2 percentage point increase in employee contributions would dramatically reduce take-home pay. The substantial increase in annual Treasury revenues would decrease the budget deficit. The cumulative reduction for the first five years would be an estimated $17.9 billion.

Option VI: Provide Social Security and Representative Private Pension Benefits to Federal Civilian Employees

This option would require complex and far-reaching changes to the current system. The retirement income from the hypothetical employee's social security and smaller civil service pension would be about 63 percent of final salary after taxes, as compared with the 76 percent available under the current system. The long-term cost to the government would decline from 15.6 percent of pay to 9.4 percent. Option VI would result in an estimated net budget loss of $710 million in fiscal year 1980. (A $350 million reduction in benefit outlays would be more than offset by a $1.06 billion revenue loss from lower employee contributions.) Beginning in fiscal year 1982, the combined effect on outlays and revenue would produce a net savings. Over the first five years, the cumulative net reduction is estimated to be $1.8 billion.

SUMMARY OF COST REDUCTIONS

The budget reductions associated with the retirement alternatives are set forth in Summary Table 2. In order to illustrate the full budgetary impact, the estimates assume that the alternatives would apply to employees retiring after September 30, 1979. Changes in cost-of-living adjustments, however, would apply to both new and current retirees. If the alternatives were phased in over a number of years, the full budgetary impact would be deferred.

The cumulative five-year budgetary impact of these alternatives to the current system range from a reduction of $0.7 billion for changes in disability provisions (Option III) to a $17.9 billion reduction for increasing employee contributions

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SUMMARY TABLE 2. BUDGET REDUCTIONS RESULTING FROM ALTERNATIVES TO CIVIL SERVICE RETIREMENT SYSTEM FOR SELECTED FISCAL YEARS: IN BILLIONS OF DOLLARS a/

	Near Term b/					Cumulative Reductions for First Five Years	Long Run c/	
	1980	1981	1982	1983	1984		10th Year 1989	15th Year 1994
Option I: Current System	--	--	--	--	--	--	--	--
Option II: Reduced Early Retirement Outlays, Net Impact	0.14	0.42	0.72	1.06	1.43	3.77	2.02	2.94
Option III: Stricter Disability Eligibility and Improved Benefits Outlays, Net Impact	0.03	0.08	0.14	0.21	0.28	0.74	0.26	.01
Option IV: Reduced Cost-of-Living Adjustment Outlays, Net Impact	0.20	0.46	0.75	1.07	1.43	3.91	2.76	4.79
Option V: Increased Employee Contribution Revenues, Net Impact	3.13	3.32	3.59	3.80	4.03	17.87	5.55	7.64
Option VI: Social Security and Private Pension Benefits								
Lower outlays	0.35	0.91	1.52	2.18	2.92	7.88	4.50	6.62
Less revenue loss	1.06	1.12	1.22	1.29	1.37	6.06	1.89	2.60
Net impact	(0.71)	(0.21)	.30	.89	1.55	1.82	2.61	4.02

a/ Estimates assume the options would apply to all employees retiring after September 30, 1979, except for changes in cost-of-living adjustments (COLA). COLA changes under Options IV and VI would apply to both new and existing retirees, effective in September 1979.

b/ The near-terms estimates are based on CBO economic assumptions of September 1978.

c/ Long-run estimates assume that annual pay increases during the next 15 years will average 6.6 percent; interest rates, 7 percent; and annual increases in the Consumer Price Index, 5 percent.

(Option V). Estimates for Option VI assume that civil service employees would receive social security benefits as if they had been covered during their prior years of federal employment. In implementing Option VI, it would be most difficult to accomplish an equitable and satisfactory transition for current employees.

CHAPTER I. INTRODUCTION

Most federal civilian employees--some 2.7 million--are covered by the Civil Service Retirement (CSR) system. This system, which was established in 1920, includes age retirement, disability, and survivor benefits. In fiscal year 1977, CSR benefits were distributed to some 1.5 million retired or disabled annuitants, including 406,000 survivors. Most of the 86,000 new employee annuitants became eligible for immediate benefits that year by either meeting age and service requirements for voluntary retirement (48.7 percent) or disability provisions (38.6 percent). The remaining new annuitants (12.7 percent) either drew a deferred annuity at age 62 after working 5 years or more, were separated involuntarily, or retired under other provisions of law (see Table 1). Between fiscal years 1978 and 1984, an average of 92,000 people a year will be added to the employee annuity rolls and 41,000 will be added to the survivor rolls.

In recent years, there has been increasing concern that the cost of civil service retirement may unduly burden present and future taxpayers. Annual CSR outlays have increased from $2.8 billion in fiscal year 1970 to $9.6 billion in fiscal year 1977. By fiscal years 1980, 1984, and 2015, these outlays are projected to reach $13.7 billion, $20.4 billion and $194.4 billion, respectively. Inflation, of course, accounts for a significant part of the increasing cost of all government programs. As measured in 1980 dollars, CSR outlays would be $16.2 billion in 1984 and $35.7 billion in the year 2015.

One way of assessing the cost of CSR is by comparing both its costs and its benefit structure with the cost and kinds of benefits available in the private sector--an approach consistent with the current federal policy that government salaries be comparable with those in private industry.

Retirement practices in the private sector and in the federal government differ. The CSR system is generally viewed as a substitute for both the social security program, which was established more than a decade after CSR, and an employer-provided retirement plan. Thus, CSR benefits, which are based on salary and years of government service, are intended to pro-

TABLE 1. EMPLOYEE ANNUITANTS AND SURVIVORS ADDED TO CIVIL SERVICE RETIREMENT ROLLS IN FISCAL YEAR 1977 a/

Type of Beneficiary	Number	Percent
Employee Annuitants		
Age retirement		
30 or more years of service	25,961	30.3
20 to 29 years of service	8,859 b/	10.4
5 to 19 years of service	6,811	8.0
Subtotal	41,631	48.7
Disability	33,036	38.6
Other		
Deferred annuity	4,143	4.8
Involuntary separation after 20 or more years of service	3,636	4.2
Other provisions	3,122 c/	3.6
Subtotal	10,901	12.7
Total	85,568	100.0
Survivors		
Widows	22,215	69.4
Widowers	1,283	4.0
Children	8,505	26.6
Total	32,003	100.0

a/ Totals may not add because of rounding.

b/ Estimated from Civil Service Commission data.

c/ Includes 1,773 persons retiring at age 70 with 15 years service. Mandatory federal retirement has been abolished.

vide "adequate" income during retired years. Social Security, on the other hand, provides only a financial cushion for retirees: it was not designed to be the sole source of retirement income. In addition, social security retirees with low earnings throughout their careers or those with the greater needs associated with large families tend to receive proportionately greater social security benefits. The CSR program does not have such redistribution aspects.

Employer-provided retirement plans were generally established to augment social security benefits. Today, about half of the workers covered by social security participate in private pension programs. Private pensions are normally offset by 50 percent of the primary social security benefit; that is, pension benefits are "integrated" to reflect the proportion of social security benefits funded by the employer. 1/

Both the kind and level of CSR's current benefit provisions and its independence from social security are basic questions concerning the future direction of the current program. Specific CSR provisions which vary the most from private sector practices include:

- o Full retirement benefits as early as age 55, after 30 years of service;
- o Liberal eligibility requirements for receiving disability benefits; and
- o Automatic adjustment of benefits for changes in the cost of living. (This provides 100 percent indexation and is of particular concern because of its budgetary cost.)

An additional concern is CSR's independence from social security. The two systems are separate in that neither recognizes the eligibility or benefit provisions of the other. As required by the Social Security Amendments of 1977, the Secretary of Health, Education and Welfare is currently undertaking a two-year study of social security coverage. The study will examine the desirability and feasibility of extending social security to employees not currently covered, including federal civilians.

1/ Contributions to social security are equally distributed between employees and employers.

The principal objective of this paper is to provide an analytical basis for assessing the cost of both the current civil service retirement program and future budgetary options. Thus, the remaining chapters in this paper:

- o compare retirement benefits in the civil service with those available in the private sector, including social security;
- o analyze both the present and future costs of the current CSR system: and
- o discusses alternatives to the current program, including their potential effects on the federal budget and employee benefits.

CHAPTER II. COMPARISON OF CIVIL SERVICE AND PRIVATE SECTOR RETIREMENT

This chapter compares retirement benefits available under the civil service program with those available in the private sector under social security and a representative employer-provided plan. Unless otherwise indicated, the data used in this paper to determine average and median provisions for retirement, disability, and survivor benefits in the private sector are based on a 1977 survey of 448 companies which together employ a total of 5 million workers. 1/ Companies were included in the survey only if they met both the minimum size and the industrial classification criteria used to determine annual pay adjustments for federal white-collar employees. In order to develop a representative private pension plan, the company data were weighted by the number of their white-collar employees (those exempt from the Fair Labor Standards Act).

The representative plan is a composite of particular retirement provisions commonly available in the private sector. Each provision in the composite plan reflects the average and median provisions available to the 1,146,000 white-collar workers employed by the companies surveyed in 1977. 2/

1/ The data base was drawn from the annual Hay/Huggins Non-Cash Compensation Survey (Spring/Summer 1977) and was analyzed for the Congressional Budget Office by Hay Associates.

2/ The effect of occupational differences among white-collar employees is not addressed in this paper. Data collected by the Social Security Administration indicate differences in the level of private pension income received among various occupational groups, which may reflect variations in earnings levels and benefit formulas. Such differences could have significant implications for proposals to split the general pay schedule into two systems--one for professional administrative occupations and another for clerical and technical occupations.

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The major differences between civil service and prevailing practices in the private sector, described in the succeeding sections of this chapter, are the level of retirement benefits, provisions for early retirement, disability provisions, cost-of-living adjustments, and employee contributions.

LEVEL OF RETIREMENT BENEFITS

The amount of a federal employee's civil service annuity is determined by his average annual salary for the three years of highest earnings (referred to as the "high three") and by his total years of government service, including military. The percentage of high three salary to be received as a pension increases with the length of government service--starting at 7.5 percent after the first five years of service, reaching 16.25 percent at 10 years, and increasing thereafter by an additional 2 percentage points per year. The maximum of 80 percent may be attained after 41 years and 10 months.

The CSR credit for military service (particularly for service prior to 1957) 3/ has a considerable impact on current civil service retirement, in part because the federal civilian workforce has almost twice as many veterans (48 percent) as the national workforce (25 percent). As a group, male civil servants retiring in fiscal year 1976 averaged 4.6 years of military service. When applicable, the military credit permits the employee to retire earlier and to increase the size of the benefit. As a result of reduced military manpower requirements and the termination of the draft in 1972, the proportion of new retirees expected to have military service (particularly prior to 1957) should decline in the future.

A representative plan in the private sector provides an annuity based on an employee's average annual salary for the five years of his highest earnings. The formula is 1.5 percent of

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3/ Military service was first covered by social security in 1957. The CSR retirement credit for military service prior to this time is permanent. Military service since 1957 may be credited only until the individual is eligible for social security. At that point, the credit for post-1956 service is lost and the civil service pension is decreased accordingly.

average salary for each year of employment. The resulting annuity is offset by 50 percent of the primary social security benefit. Unlike CSR, the representative private plan has no maximum and does not allow credit for military service preceding company employment.

Several unique aspects of social security significantly affect the level of retirement income received. Most noticeably, social security provides:

- o Proportionately greater benefits to employees with lower earnings;
- o A supplemental benefit to retirees with a dependent (nonworking) spouse; 4/ and
- o Tax-free income during retirement. 5/

Unlike CSR, social security limits the amount of income a person may earn after retirement. Beginning in January 1979, social security benefits will be reduced dollar-for-dollar for annual earnings in excess of $3,480 for retirees under age 65, or $4,450 for those 65 and over.

At present, approximately 67 percent of civil service retirees age 65 or over have also earned social security bene-

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4/ Half of the wives receiving social security do so as a dependent spouse and half on the basis of their own employment credits. The proportion receiving dependent benefits should diminish in the future as a greater percentage of married women participate in the labor force. In 1950, 23.8 percent of married women were in the labor force; in 1970, 40.8 percent; in 1976, 45.0 percent.

5/ In some cases, the civil service retiree is entitled to a credit for the elderly on his federal income tax return. For civil servants who retire after age 65, the credit is available on a declining scale for those with pensions up to $12,500 if single or up to $15,000 if married and both spouses are age 65 or over. For those retiring before age 65, the credit is $375, assuming the annual pension exceeds $2,500.

fits. These persons are often referred to as "dual beneficiaries." 6/ In fiscal year 1980, the federal government will spend an estimated $1.3 billion in social security benefits for civil service retirees who become eligible through nonfederal employment. About half of that amount--$680 million--will be for employees with 20 or more years of federal service. The tax-free social security benefits represent a significant augmentation of retirement income for those employees. The average civil service pension in 1980 for retirees with 20 or more years of federal service is estimated to be $12,500. For individuals receiving dual benefits, the CSR pension will be supplemented by about $2,100.

EARLY RETIREMENT

Under the Civil Service Retirement System, most federal employees may retire as early as age 55, if they have 30 years of federal service. 7/ Since early retirement benefits are higher under CSR than those commonly available in private industry, federal employees retire at much earlier ages than do employees in the private sector.

Pension plans in the private sector are usually based on a retirement age of 65. Although private pension plans often provide for earlier retirement, the benefits are substantially reduced to reflect the longer pay-out period. In the private sector, the pension earned up to the time of early retirement is commonly reduced by 3.5 percent for each year between age 65

6/ Data on civil service annuitants who also receive social security benefits are derived mainly from a December 1975 sample analyzed by the Social Security Administration. See Daniel N. Price and Andrea Novotny, "Federal Civil Service Annuitants and Social Security, December 1975," Social Security Bulletin (November 1977), pp. 3-18.

7/ Some civil service employees may receive a pension before age 55 if they (a) retire under special provisions for law enforcement officers or firefighters; (b) are employed by an agency undergoing a major cutback; or (c) are involuntarily separated for other than misconduct or delinquency. In the latter two cases, the annuity is reduced by 2 percent for each year the employee is under age 55.

and 60 and by 4 percent for each year below age 60. 8/ Similarly, social security benefits may be received at age 62, but they are reduced by 6 2/3 percent for each full year before age 65.

Thus, for example, if an employee retired under private sector provisions at age 62 with a final salary of $25,200, his combined benefits earned under a private pension and social security would be reduced by some 14.6 percent. If he elected to retire at age 55, he would face a 37.5 percent reduction of earned benefits.

Since social security may not be received (even at a reduced level) until age 62, it influences the retirement age in the private sector. Approximately 80 percent of male retirements under private plans occur at age 62 or after, as compared with 36 percent for male civil servants (see Table 2). Further, in light of current CSR provisions, it is not surprising that federal employees retire at earlier ages than those in the general workforce. Nearly half of all male civil service retirements occur before age 60, as compared with less than 10 percent of the male workforce covered by social security and a company pension.

An employee forfeits his right to a private company pension if he stops working before completing 10 years or more of company service. This is referred to as "vesting" after 10 years of service. Only five years of civilian service are required for vesting under CSR. If the federal requirement were extended to 10 years, fewer individuals would be entitled to a deferred annuity at age 62.

DISABILITY PROVISIONS

Continuation of income in the event of long-term or permanent disability is a substantial benefit. Eligibility for disability benefits is more liberal under CSR than in the private sector, but the size of the CSR pension is smaller.

8/ This reduction in the private pension is normally taken after it has been decreased (offset) for half of the primary social security benefit.

TABLE 2. DISTRIBUTION OF NEW MALE CIVIL SERVICE AND PRIVATE SECTOR RETIREES BY AGE AT RETIREMENT, FISCAL YEAR 1976: IN PERCENTS

Age at Retirement	Civil Service a/	Private Sector b/
Under 55	9.5	1.1
55 - 59	39.6	6.3
60 - 61	14.5	12.6
62 - 64	18.1	42.1
65 and Over	18.3	37.9
	100.0	100.0

a/ Calculated from data on men who retired under Civil Service during fiscal year 1976, excluding those who were disabled or received deferred pensions.

b/ Age at which private pension was first received by men awarded social security retirement benefits in fiscal year 1970. (Data includes some individuals who also received civil service benefits.) U.S. Department of Health, Education, and Welfare, Social Security Administration, Office of Research and Statistics, Research Report No. 47, Table 12.4, p. 172.

Eligibility Criteria

A federal civil service employee is eligible for disability if he is unable to perform one or more significant functions of his present job. The civil servant cannot be required to accept a modified or less demanding assignment. If he is voluntarily transferred to another job with the government, his disability rights are waived. Under the existing civil service criteria, nearly 98 percent of disability applications are eventually approved, in a process that relies almost entirely on certifications from the applicant's employer and doctor.

Stricter standards are used for determining eligibility in the private sector. Private plans generally follow social security criteria, which deny disability benefits if the employee is able to work at another job assignment.

Civil servants are much more likely to receive disability benefits than employees in the private sector because of this difference in eligibility standards. The probability of civil service males, ages 30 through 50, receiving disability is at least 50 percent greater than if private standards were used. The difference between civil service and private sector disability rates narrows for higher age groups, but it is still 20 percent greater for civil service males age 60 through age 65 (see Table 3).

A recent study by the General Accounting Office (GAO) suggests that the civil service disability standards are loosely administered and too permissive. On the basis of a sample audit, GAO found that in 9.5 percent of the awards there was insufficient medical evidence to support the eligibility determination; in another 10.5 percent of the awards, the evidence indicated the person should not have been awarded a pension under existing criteria. In recommending a more restrictive statutory definition of disability, GAO estimates that one out of five employees currently awarded civil service disability appeared capable of performing useful and efficient service. 9/ As

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9/ General Accounting Office, Civil Service Disability Retirement: Needed Improvements, (November 19, 1976). The Civil Service Commission does not agree with the opinions and conclusions of the GAO medical examiner.

TABLE 3. PROBABILITY OF MALES RECEIVING DISABILITY BENEFITS UNDER CURRENT CIVIL SERVICE ELIGIBILITY STANDARDS AND UNDER THOSE USED IN PRIVATE SECTOR

Attained Ages	Rate of Disability per 100 Employees: CSC standard a/	Rate of Disability per 100 Employees: Private standards b/	Percentage by Which CSC Rate is Greater than Private Rate
30	.0014	.0009	55.6
40	.0056	.0037	51.4
50	.0137	.0091	50.5
55	.0231	.0159	45.3
58	.0302	.0232	30.2
60	.0342	.0285	20.0
63	.0452	.0377	19.9
65	.0564	.0470	20.0

a/ Disability rates are based on actuarial tables obtained by Hay Associates from Civil Service Commission data. The actual number of new beneficiaries will vary at any given time from the actuarial rates.

b/ Rates of disability under private standards are taken from CSC experience when eligibility provisions were administered consistent with private sector standards, which do not accept disability as "total and permanent" if the individual can accept another job.

a practical matter, a civil service annuitant may continue receiving payments as long as post-disability income does not exceed 80 percent of final salary for two consecutive years. Currently, about one-tenth of 1 percent of civil service disability annuitants have their benefits terminated each year, although nearly one-third are working at incomes within the statutory limitation.

Level of Disability Benefits

Most federal disability annuitants (60 percent of those retiring as disabled in 1976) receive disability benefits as if retiring under the general federal retirement formula: 16.25 percent for the first 10 years, plus 2 percent for each additional year. The actual amount for a particular federal employee depends on his years of service and age at the time of disability. Benefits for civil servants disabled in 1976 averaged 43 percent of final annual salary. 10/

Employers in private industry commonly supplement social security disability coverage with private long-term disability (LTD) insurance. The actual wage replacement from social security and private LTD insurance for the private sector employee depends on the number of the employee's dependents and his income. The prevailing practice is for LTD insurance to provide benefits equal to 50 percent of average high-five earnings (offset by half of the amount received from social security). The social security disability benefit is generally calculated as if the individual had retired at age 65. Unlike civil service retirement, social security disability may be increased by as much as 75 percent for family benefits when there are at least two additional dependents.

Thus, for example, if a civil servant earning $25,200 were disabled in 1979 after 23 years of service, he would receive disability benefits amounting to 40 percent of final pay, re-

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10/ Federal employees disabled early in their career receive benefits greater than those provided under the general formula, up to a maximum of 40 percent of their "high three" average annual salary. In fiscal year 1976, the benefits for this group averaged some 39 percent of pay.

gardless of the number of dependents. His counterparts in the private sector would receive disability benefits amounting to 56 percent of final pay ($8,400 from private LTD insurance and $5,700 from social security). If he claimed two additional dependents, his social security benefit could be increased by a maximum of 75 percent ($9,900). Maximum disability benefits from both sources ($18,300) would total approximately 73 percent of final pay before taxes. 11/

The disparity between disability benefits available to the civil servant and the private sector employee widens when the effect of income taxes is taken into account because social security benefits are not subject to taxation. Both the private sector and civil service employee, however, may benefit from:

- Additional exemptions when dependents are claimed; and

- An exclusion of up to $5,200 in disability income if total income is less than $20,200. 12/

Taking the tax implications into account, the after-tax benefits for the disabled worker in the private sector (at a final salary of $25,200) are 84 percent of pay with no dependents and 99 percent with maximum family benefits (two additional dependents). These after-tax benefit ratios compare with 59 percent and 55 percent, respectively, for a civil servant disabled at the same income level (see Table 4).

EMPLOYEE CONTRIBUTIONS

The civil service retirement system requires an employee contribution of 7.0 percent of pay. In addition, most civil servants elect to participate in the group life insurance program.

11/ Combined disability benefits available to the private sector worker vary as a percent of pay with the individual's income largely because of the income redistribution aspects of social security.

12/ The $5,200 exclusion is reduced dollar-for-dollar for income in excess of $15,000.

TABLE 4. COMPARATIVE EXAMPLES OF CIVIL SERVICE AND PRIVATE SECTOR BENEFITS AND DEDUCTIONS FOR AN EMPLOYEE DISABLED IN 1979 AT A FINAL SALARY OF $25,200, BEFORE AND AFTER TAXES: IN DOLLARS a/

	Civil Service		Private Insurance and Social Security	
	Single	With Two Additional Dependents	Single	With Two Additional Dependents
Final Salary	25,200	25,200	25,200	25,200
Disability Income	10,000 b/	10,000 b/	14,000	18,300
Disability Income as a Percent of Final Salary, Before Taxes	39.7	39.7	55.6	72.6
Disability Income as a Percent of Final Salary, After Taxes	59.1	55.0	84.0	99.5
Deductions While Employed				
Final Salary	25,200	25,200	25,200	25,200
Withholding for retirement	-1,800	-1,800	-1,400	-1,400
Income Taxes c/	-7,500	-5,600	-7,500	-5,600
Final Salary After Taxes	15,900	17,800	16,300	18,200
Tax Deductions While Disabled				
Disability Income	10,000	10,000	14,000	18,300
Income Taxes c/	-600	-200	-300	-200
Disability Income, After Taxes	9,400	9,800	13,700	18,100

a/ Estimates have been rounded to the nearest $100.

b/ Benefits assume 23 years of federal service.

c/ Combined federal and representative state income taxes. State income taxes based on rates for the State of Colorado, July 1, 1976.

The total civil service employee contribution for retirement, disability, and survivors benefits (including life insurance) is thus estimated at 7.9 percent of pay.

Since the employee contribution for federal retirement is matched by an equal amount from the employing agency, it is commonly believed that civil service retirement costs are shared fifty-fifty between employee and employer. But when future pay raises and cost-of-living adjustments are taken into account, employee contributions to civil service retirement are estimated to cover about one-third of the cost of future benefits (see Table 5).

In the private sector, the dominant practice is for retirement plans to be noncontributory. Nevertheless, the private sector employee does contribute to social security and about 45 percent of the cost of private long-term disability (LTD) insurance. Under the Social Security Amendments of 1977, the employee tax rates are scheduled to increase in 1979 and subsequent years. Over his career, the federal employee would contribute about 5.8 percent of his pay if under social security and private disability insurance--about 2.1 percent of pay less than the contribution under the current CSR system. 13/

COST-OF-LIVING ADJUSTMENTS (COLA)

An important and costly issue in any retirement plan is the degree to which it protects the individual's pension from being eroded by inflation. The protection afforded persons retiring from the federal civil service contrasts sharply with that provided retirees from the private sector. Annuities for civil service retirees are automatically adjusted twice a year to keep pace with increases in the cost of living (as determined by

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13/ For comparative purposes, the contribution for social security health insurance is excluded.

TABLE 5. COMPARISON OF FEDERAL EMPLOYEE CONTRIBUTIONS AS A PERCENT OF PAY WHILE EMPLOYED UNDER CURRENT CIVIL SERVICE SYSTEM AND UNDER PRIVATE SECTOR PROVISIONS a/

	Current Civil Service	Social Security & Private Disability Insurance b/	Difference
Total Cost	23.5	15.2	8.3
Employee Contributions	7.9 c/	5.8 d/	2.1
Employee Share of Total Costs	33.6	38.2	NA

SOURCE: Congressional Budget Office from calculations prepared by Hay Associates.

a/ Estimates based on economic assumptions used by the Office of Management and Budget under Circular A-76: annual inflation rate of 4 percent, interest of 6.5 percent, and annual pay adjustments of 5.5 percent in addition to individual career advancement and within grade increases.

b/ Estimates exclude social security health insurance coverage.

c/ Includes 0.9 percent of pay from contributions to Federal Employees Group Life Insurance.

d/ Includes .78 percent of pay for private long-term disability insurance and 5.02 percent of pay for social security. The social security estimate is an average reflecting future increases in withholdings.

changes in the Consumer Price Index). 14/ The methods and extent to which an employee in the private sector is protected against inflation after retirement vary widely.

Individuals retiring with a private pension receive social security benefits, which are adjusted once a year for increases in the cost of living. But 37 percent of private pension plans do not grant cost-of-living increases of any kind. Only a handful (3 percent) have an explicit COLA provision, and even here the adjustments average 85 percent of increase in the CPI. As a group, retirees with private pensions plans receive an estimated 29 percent of increases in the cost of living (see Table 6).

TABLE 6. DISTRIBUTION OF PRIVATE PENSION PLANS BY TYPE OF COST-OF-LIVING ADJUSTMENT (COLA): IN PERCENTS

Type of COLA	Private Pension Plans	Average Portion of CPI Granted
No Increase Granted	37	0
Explicit Increases Provided	3	85
Ad Hoc Adjustments	60	44
All Plans	100	29

SOURCE: Congressional Budget Office. Data supplied by Hay Associates except for average portion of CPI granted under ad hoc provisions. This average was estimated by CBO based on data from the Social Security Administration's Retirement History Survey.

14/ New retirees also benefit from cost-of-living increases occurring during the last few months before retirement. The General Accounting Office recommends that the law be changed to prorate the individual's first adjustment to reflect only cost-of-living increases occurring after the date of retirement. General Accounting Office, Cost-of-Living Adjustments for New Federal Retirees, (November 17, 1977).

Limited data from the Social Security Administration's Retirement History Survey suggest that, overall, private pensions do not keep up with increases in the cost of living. The median private pension of persons receiving an annuity in both 1972 and 1974 increased 7.3 percent, as compared with a 16.9 percent increase in the cost of living during that two-year period. Although there are factors that may have influenced the comparison, the data imply that periodic increases provided on an ad hoc basis recovered about 44 percent of the annual increase in the cost of living between 1972 and 1974.

The annual COLA for social security benefits moderate the total impact of inflation on the private retiree. On the average, it is estimated that cost-of-living adjustments for the

TABLE 7. ESTIMATED EXTENT PENSIONS ARE ADJUSTED FOR INCREASES IN THE COST-OF-LIVING BY TYPE OF RETIREMENT

Type of Retirement	Percentage of Cost-of-Living Increases Recovered by Pension Adjustment
Civil Service	100
Combination of Private Pension and Social Security a/	70
Social security	100
Private pension	29

a/ The 70 percent estimated reflects retirement income which would be received by federal white collar workers if social security and a private pension were provided.

combination of social security and a private pension recover about 70 percent of increases in the Consumer Price Index (Table 7). Over a 10-year period, this would reduce a retiree's purchasing power by an estimated 16 percent, assuming a 6 percent annual rate of inflation. Civil service retirees, however, suffer no loss in purchasing power, since their benefits are fully indexed.

CHAPTER III. THE COST OF CIVIL SERVICE RETIREMENT

SETTING--WHO PAYS WHAT

The CSR system is financed through a government trust fund account in the federal budget. The fund serves as a conduit into which various payments are deposited as income and from which benefits and administrative expenses are paid. Payments into the fund are counted as budget authority; payments out are counted as outlays. As a practical matter, the trust fund exists mainly for bookkeeping purposes--to identify and allocate costs within the budget.

Civil service retirement fund income consists of payroll withholdings from federal employees (currently 7 percent of pay), employer-agency contributions (also 7 percent of pay), and substantial amounts appropriated from the general Treasury. 1/ With the exception of payments from certain off-budget agencies, 2/ only employee contributions are a source of federal revenues similar to income and social security taxes. The other sources of civil service retirement income represent noncash

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1/ Annual appropriations are made to the Civil Service Retirement Fund to cover: (a) interest on the unfunded liability (present value of liabilities not covered by present assets and future income); (b) amortization of liabilities created by pay raises and legislation liberalizing benefits; and (c) annuity disbursements attributable to military service. In fiscal year 1979, these amounts are estimated to be $5.6 billion, $2.4 billion, and $.7 billion, respectively.

2/ An increase in the agency contribution rate would not affect budget outlays except for such off-budget agencies as the U.S. Postal Service and the District of Columbia Government. Contributions from these and other off-budget agencies (estimated at $1.1 billion for fiscal year 1976) offset government-wide outlay totals. For further discussion, see General Accounting Office, Federal Retirement Systems: Unrecognized Costs, Inadequate Funding, Inconsistent Benefits, (August 3, 1977), pp. 16-22.

transactions or internal bookkeeping entries, which are used mainly for identifying and allocating retirement costs (see Table 8).

Not Self-Financing

From an accounting perspective, the trust fund is not self-financing. Nearly 46 percent of the total estimated income to the fund in fiscal year 1980 represents appropriations from the general fund. These appropriations permit the fund to build up cash reserves, which are projected to reach $64 billion at the beginning of fiscal year 1980. An estimated $44 billion of that amount may be attributed to the accumulation, with interest, of general fund appropriations since fiscal year 1970. Without these appropriations, the reserves would be some $20 billion.

Even with the general fund appropriations, assets and projected income to the fund will not cover future obligations to current annuitants and active employees. This condition, which assumes that no new employees would participate in the program, is referred to as "unfunded liability." The unfunded liability of civil service retirement was $52.8 billion at the beginning of fiscal year 1971, the year in which current financing arrangements became effective. 3/ It is estimated to reach $130.8 billion at the start of fiscal year 1980; $160.1 billion, by the beginning of 1984. These increases are due primarily to the fact that contributions and appropriations to the fund do not cover costs associated with anticipated cost-of-living adjustments.

GAO has recently proposed certain bookkeeping changes in civil service retirement, which it believes would lead to better recognition and allocation of costs. Specifically, GAO would include the retirement costs associated with future pay raises and cost-of-living adjustments in the "employer" contributions paid from the current budget of operating agencies. Benefits

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3/ According to the Civil Service Commission, the $52.8 million in unfunded liability as of June 30, 1970 included: $1.6 billion, which was incurred when the system was created; $4.3 billion for deficiency in subsequent government contributions; and $46.9 billion for benefit increases, pay raises, and cost-of-living adjustments.

TABLE 8. CIVIL SERVICE RETIREMENT FUND FINANCING, FISCAL YEARS 1980-1984: IN BILLIONS OF DOLLARS a/

	1980	1981	1982	1983	1984
Fund Income--Budget Authority					
Employee contributions b/	3.5	3.7	4.1	4.3	4.6
Agency contributions	2.8	3.0	3.2	3.4	3.6
Payments from U.S. Postal Service c/	1.3	1.4	1.5	1.6	1.6
Interest earned	4.2	4.7	5.3	5.8	6.4
Other	.1	.1	.1	.1	.1
Subtotal	11.9	12.9	14.2	15.2	16.3
Appropriations from General Fund d/	10.1	10.8	11.6	12.4	13.3
Total Income	22.0	23.7	25.7	27.6	29.7
Outlays	13.7	15.2	16.8	18.5	20.4
Fund Reserves (beginning of year)	63.7	72.0	80.5	89.4	98.5
Unfunded Liability (beginning of year) e/	130.8	137.5	144.4	151.8	160.1

a/ Totals may not add because of rounding.

b/ Contributions from all employees covered by civil service retirement, including U.S. Postal Service personnel.

c/ Includes agency matching contributions and payments to amortize increased liability caused by postal pay raises.

d/ Includes payments for interest on unfunded liability, cost of credit for military service, and amortization for liability increases resulting from annual pay raises and benefit liberalizations.

e/ Unfunded liability represents the present value of benefit obligations to current annuitants and active employees that is not covered by current assets and projected fund income; it does not reflect entrance of new employees in the system.

and employee contributions would remain the same. The proposal (often referred to as "dynamic financing") is not directly concerned with either the government's ability to meet future obligations for retirement benefits or with reducing the burden on the taxpayer. The proposed change in financing and cost attribution is instead considered primarily as a means of improving "cost recognition and budget discipline." 4/

Pay As You Go

The CSR system is commonly viewed as a private insurance program in which the present generation (of federal employees and taxpayers) saves for future retirement years through fund contributions. In reality, the CSR system is a pay-as-you-go program because the current generation of federal employees (through payroll deductions) and federal taxpayers must pay the retirement costs for today's federal retirees. The government's taxing power provides the ultimate assurance that retirement obligations will be met. The system cannot be financed on other than a pay-as-you-go basis as long as it remains a part of the federal budget. 5/

This paper uses two distinct measures to analyze the cost of civil service retirement: budget outlays and "normal costs." Outlays measure costs as they are paid and as they directly affect the economy. "Normal cost" is an actuarial measure. For the current generation of federal workers, it represents the cost of future retirement benefits as a level percent of payroll during active employment. This measure views retirement as "deferred compensation" or the equivalent of wages and other kinds of compensation received by federal employees.

4/ General Accounting Office, Federal Retirement Systems: Unrecognized Costs, Inadequate Funding, Inconsistent Benefits, (August 3, 1977), pp. i and ii.

5/ By law, retirement trust funds are invested in federal debt securities.

RETIREMENT OUTLAYS

Retirement outlays, the dollar value of checks issued to CSR retirees and survivors, are included as part of total budget outlays. In any given budget, they are usually projected on a dynamic basis, reflecting the impact of anticipated pay increases and cost-of-living adjustments. Outlays are affected by changes in: eligibility criteria, benefit levels, the pay of active employees, and cost-of-living allowances for retirees. In the main, outlays would not be affected by changes in retirement financing.

Without any liberalization of benefits, the near-term budget outlays for civil service retirement and disability are estimated to increase from $13.7 billion in fiscal year 1980 to $20.4 billion in fiscal year 1984. If no pay increases or future inflation is assumed, outlays in 1984 would be reduced by some $5.0 billion.

TABLE 9. CIVIL SERVICE RETIREMENT AND DISABILITY OUTLAYS, FISCAL YEARS 1980-1984: IN BILLIONS OF DOLLARS

	1980	1981	1982	1983	1984
Current law a/	13.7	15.2	16.8	18.5	20.4
Adjusted b/	13.0	13.6	14.3	14.9	15.4

a/ Assumes average pay raises and inflation consistent with CBO economic assumptions of June 1978.

b/ Estimates are adjusted to remove impact of future inflation.

In the long term, CSR outlays will continue to rise without any change in eligibility requirements or benefit levels. The increases through the year 2015 are attributable mainly to pay raises, which affect the size of pensions for new retirees, and cost-of-living adjustments, which increase the pensions of persons already retired. Under conservative long-term economic assumptions, outlays are estimated to reach $194.4 billion by the year 2015. With no pay increases or inflation, the estimate for the year 2015 would be about $21 billion. Although this may be an unrealistic comparison, it does serve to emphasize the long-term effects of inflation and pay increases on retirement.

TABLE 10. LONG-TERM CIVIL SERVICE RETIREMENT AND DISABILITY OUTLAYS, FOR SELECTED YEARS: IN BILLIONS OF DOLLARS

	1975	1980	1995	2015
Current law a/	7.1	13.7	47.0	194.4
Adjusted b/	7.1	12.0	19.8	21.3

SOURCE: Civil Service Commission, November 1978.

a/ Estimates assume an annual inflation rate of 5 percent and annual pay increases of 6.6 percent. These economic assumptions, as well as rates of growth in the retirement system, differ from those used for near-term budget projections through 1984.

b/ Estimates adjusted to remove impact of future pay raises and inflation.

CSR outlays will represent an increasing percentage of pay for the active workers participating in the system. In fiscal year 1975, outlays were 20 percent of the payroll cost of active employees covered by CSR, as compared with an estimated 27.0 percent in 1980 and 42.0 percent in 2015. 6/

6/ These projections reflect an increase of about 60 percent in the number of people on CSR rolls between 1975 and 2015 and assume the level of federal civilian employment will remain stable.

NORMAL COST

The cost of civil service retirement can be assessed by estimating the cost of future benefits as a level percentage of salary while employed. Such estimates, referred to as "entry age normal cost," apply to the current generation of federal employees. These estimated costs, which cover the group's total years of federal work, are based on the age, sex, and income characteristics of 1.4 million federal white collar employees. The calculation reflects the relative number of employees who will die, become disabled, retire, or terminate employment at different ages. Estimates of normal cost are highly sensitive to long-term economic assumptions concerning annual rates of interest, pay increases, and inflation. 7/ Even so, normal cost provides a common denominator for comparing costs of alternative retirement systems.

Current System Compared With Private Sector

CBO retained an independent actuarial firm, Hay Associates, to calculate the normal cost of the current CSR system and alternatives to it. The Hay Associates estimated normal cost of the current CSR system is 21.9 percent of pay. 8/ The employee

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7/ Normal cost is technically defined as "the level percentage of payroll which would be sufficient...to pay all the benefits which would fall due under the plan to members of the group" (Hay Associates, Studies of Health, Sick Pay, Retirement, Disability, and Survivor Benefit Plans, prepared for Congressional Budget Office, February 1978, p. 10). Normal cost is calculated as the present value of prospective retirement benefits as a percent of the present value of payroll during active employment.

8/ The Hay estimates of normal cost are based on the following long-term economic assumptions, recommended to the Office of Management and Budget by the Council of Economic Advisors: annual pay adjustments of 5.5 percent (in addition to individual career advancement); and annual interest rate of 6.5 percent; and a 4 percent annual increase in the cost-of-living (Consumer Price Index). Federal Register (November 21, 1977), Part II and (August 22, 1978), Part IV.

contributes 7 percent of pay toward the cost of CSR and thus pays for about one-third of total estimated normal cost. The remaining two-thirds share (14.9 percent of pay) is ultimately born by the federal government. The 14.9 percent of pay represents the net cost or value of retirement benefits provided by the federal government to its employees. This cost measures retirement benefits as one form of employee compensation.

Based on the Hay estimates, the current CSR system costs more than one and a half times what the combination of social security and a representative private sector plan would cost. If federal employees were provided benefits equivalent to those in the private sector, the normal cost would be 15.2 percent of pay instead of the current 23.5 percent. 9/ The net cost to the government is the difference between normal cost and employee contributions. If the government adopted private sector practices, federal employee contributions would decrease from 7.9 percent of pay to about 5.8 percent. Similarly, the net cost to the government would be substantially reduced--to 9.4 percent of pay, as compared with 15.6 percent under the current system. Based on the fiscal year 1980 payroll for those participating in civil service retirement, this is equivalent to about $3.1 billion per year. The 6.2 percentage point difference in normal cost represents the net effect of many provisions of the civil service system, the most significant of which occur in employee contributions and various provisions affecting benefits for age retirement. As a group, federal employees receive more compensation in the form of retirement than they would under the combination of social security and a representative private sector plan (see Table 11).

Differences in Normal Cost Estimates

The Office of Management and Budget estimate of CSR normal cost (27.4 percent of pay) is 5.5 percentage points greater than the Hay estimates of 21.9 percent. Both estimates include costs associated with future pay raises and cost-of-living adjustments.

9/ In order to make like comparisons to the private sector, the Federal Employees Group Life Insurance Program has been included as part of the survivor benefits under the civil service system.

TABLE 11. COMPARISON OF NORMAL COSTS OF RETIREMENT UNDER CIVIL SERVICE AND UNDER PRIVATE SECTOR (COMPANY PLAN AND SOCIAL SECURITY) AS A PERCENT OF PAY a/

Type of Retirement Plan	Type of Benefits			
	Age Retirement	Disability	Survivor	Total
Civil Service b/	15.0	4.6	3.8	23.5
Employee Contributions (-)	4.8	1.5	1.6	7.9
Net cost to employer	10.2	3.1	2.2	15.6
Private Sector Company Plan and Social Security Combined c/	8.0	5.8	1.3	15.2
Employee contributions, combined (-)	2.8	2.6	.4	5.8
Net cost to employer	5.2	3.2	.9	9.4
Detail for Private Sector				
Benefits				
Company Plan	2.4	2.3	.5	5.2
Social Security c/	5.6	3.5	.8	10.0 d/
Employee contributions				
Company Plan	--	.8	--	.8
Social Security c/	2.8	1.8	.4	5.0

a/ Totals may not add because of rounding.

b/ Estimates for CSR include the costs and benefits of the Federal Employees Group Life Insurance program.

c/ Estimates exclude social security health insurance.

d/ Estimate is based on employer and employee contributions to social security. It reflects future increase in the social security tax base and withholdings rates.

The estimates also incorporate the same economic assumptions and probabilities concerning job termination, mortality and retirement. The variation between the OMB and Hay estimates result, in part, from a number of technical differences in actuarial forecasting. 10/ In addition, the OMB estimate is based on a sample of 100,000 employees hired in 1967 through 1969 as compared with the data base used by Hay--some 1.4 million active employees covered by CSR as of March 1978. The Hay model was used for estimates in this paper because of its ability to measure the impact of alternatives to the present system. By comparing normal costs generated by the Hay model, the cost of particular changes to the retirement system can be identified. 11/

10/ Technical differences between OMB and Hay forecasting include their treatment of: individuals re-employed after a break in federal service, disability prior to five years of service, value of benefits for the survivor of a retiree, and credit for military service.

11/ The chief actuary of the Civil Service Commission disagrees with the Hay estimate of the CSR system. However, he considers the difference in normal cost between the current CSR system and a combination of social security and a representative private plan to be reasonable.

CHAPTER IV. THE FUTURE OF CIVIL SERVICE RETIREMENT: BUDGETARY OPTIONS AND THEIR EFFECTS ON BENEFITS

The two basic issues regarding the future cost of the civil service retirement system are the kinds and level of its benefit provisions and its independence from social security. The options presented in this chapter address both questions. Option I would continue the current CSR system. Options II through V would maintain CSR's independence but modify current benefit provisions. Each of those four options would make particular employee benefits or costs to the government more consistent with private sector practices. Option VI, the most far-reaching approach, would provide social security and representative private pension benefits to federal civilian employees.

There are many possibilities for changing the future direction of civil service retirement. The following alternatives address major aspects of the current system:

Option I:	Continue the current system;
Option II:	Reduce early retirement benefits by adopting provisions of a representative private plan;
Option III:	Adopt stricter eligibility standards and improve benefits for long-term disability;
Option IV:	Limit cost-of-living adjustments to 70 percent of increases in the Consumer Price Index;
Option V:	Increase employee contributions;
Option VI:	Provide social security and representative private pension benefits.

Since the impact of alternative retirement systems on the budget would be small in the first few years, the effects of the alternatives are analyzed both in the short term (fiscal years 1980 through 1984) and in the tenth and fifteenth years (in

1989 and 1994). 1/ For estimating purposes, the changes in civil service retirement are assumed to apply to all employees retiring after September 30, 1979. Changes in cost-of-living adjustments would, however, apply to both new and existing retirees (Options IV and VI). If the changes were phased in over a transition period, the full savings would not be realized until later years. As identified in Table 12, cumulative five-year budget reductions for the alternatives analyzed in this report range from $0.7 billion for changes in disability provisions (Option III) to $17.9 billion for increasing employee contributions (Option V). In 1989 through 1994, annual savings in Options II, IV, V, and VI would be substantial (see Table 12).

OPTION I: CONTINUE THE CURRENT SYSTEM

Under Option I, the civil servant would receive retirement benefits based on current law. These benefits are generally more liberal than those available to white-collar employees in private industry under a combination of social security and a representative private pension. Under the current system, the after-tax income of a hypothetical civil servant retiree is estimated to be 76 percent of net income (before retirement and after taxes.) 2/ This compares with an after-tax rate of 63 percent available from a combination of a private pension and social security (for a detailed comparison of retirement income see Table 13).

Although civil service benefits are greater, so is the employee contribution. The civil servant would continue to contribute 7.9 percent of pay to retirement, disability, and

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1/ Estimated retirement costs over the next 15 years reflect the characteristics of the present workforce. Estimates of outlays over a longer period would be less reliable because the characteristics of new employees would play an increasingly larger role.

2/ The hypothetical civil servant is assumed to retire at age 62 after 4 years of military service and 30 years of civilian employment. The example assumes the individual is single and has a final salary of $25,200.

TABLE 12. BUDGET REDUCTIONS RESULTING FROM ALTERNATIVES TO CIVIL SERVICE RETIREMENT SYSTEM, FOR SELECTED FISCAL YEARS: IN BILLIONS OF DOLLARS a/

	Near Term b/					Cumulative Reductions for First Five Years	Long Run c/	
	1980	1981	1982	1983	1984		10th Year 1989	15th Year 1994
Option I: Current System	--	--	--	--	--	--	--	--
Option II: Reduced Early Retirement Outlays, Net Impact	0.14	0.42	0.72	1.06	1.43	3.77	2.02	2.94
Option III: Stricter Disability Eligibility and Improved Benefit Outlays, Net Impact	0.03	0.08	0.14	0.21	0.28	0.74	0.26	.01
Option IV: Reduced Cost-of-Living Adjustment Outlays, Net Impact	0.20	0.46	0.75	1.07	1.43	3.91	2.76	4.79
Option V: Increased Employee Contribution Revenues Net Impact	3.13	3.32	3.59	3.80	4.03	17.87	5.55	7.64
Option VI: Social Security and Private Pension Benefits								
Lower outlays	0.35	0.91	1.52	2.18	2.92	7.88	4.50	6.62
Less revenue loss	1.06	1.12	1.22	1.29	1.37	6.06	1.89	2.60
Net impact	(0.71)	(0.21)	.30	.89	1.55	1.82	2.61	4.02

a/ Estimates assume the options would apply to all employees retiring after September 30, 1979, except for changes in cost-of-living adjustments (COLA). COLA changes under Options IV and VI would apply to both new and existing retirees, effective in September 1979.

b/ The near-terms estimates are based on CBO economic assumptions of September 1978.

c/ Long-run estimates assume that annual pay increases during the next 15 years will average 6.6 percent: interest rates, 7 percent; and annual increases in the Consumer Price Index, 5 percent.

TABLE 13. EXAMPLE OF BENEFITS AS A PERCENT OF FINAL PAY FOR A PERSON RETIRING AFTER 30 YEARS OF CIVILIAN EMPLOYMENT AT A FINAL SALARY OF $25,200, BEFORE AND AFTER TAXES: IN DOLLARS a/

	Civil Service	Private Plan and Social Security
Final Salary	25,200	25,200
Less Taxes:		
Withholding for retirement	1,800	1,200
Federal and state income taxes	7,500	7,500
Final Salary, After Taxes	15,900	16,500
Retirement Income	15,300	11,100
Less Taxes		
Federal and state income taxes	3,300	700
Retirement Income, After Taxes	12,000	10,400
Retirement Income as a Percent of Final Salary, Before Taxes	60.7	44.0
Retirement Income as a Percent of Final Salary, After Taxes	75.5	63.0

a/ The hypothetical civil servant is assumed to have four years of military service prior to 30 years of civilian employment, to have a working spouse, and to file a separate tax return based on 1977 rates. Numbers used in detailed calculations have been rounded to the nearest $100.

TABLE 14. COMPARISON OF CIVIL SERVICE RETIREMENT ALTERNATIVES ON THE BASIS OF NORMAL COST ESTIMATES a/

	Level Percent of Pay While Employed		
	Total	Employee Contributions	Cost to Government
Option I: Current System	23.5	7.9	15.6
Option II: Reduction of Early Retirement Benefits	21.9	7.9	14.0
Option III: Stricter Disability Eligibility and Improved Benefits	23.5	7.9	15.6
Option IV: Reduction of Cost-of-Living Adjustments	21.0	7.9	13.1
Option V: Increased Employee Contributions	23.5	14.1	9.4
Option VI: Social Security and Private Pension Benefits	15.2	5.8	9.4

a/ The normal cost estimates assume an annual rate of 4 percent inflation, 5.5 percent annual pay adjustments, a 6.5 percent annual return on investment, and an average of 2 years military service for future male retirees.

survivor benefits (including life insurance). If he were under social security and private disability insurance, he would contribute about 5.8 percent. Similarly, when all of the characteristics of the present CSR system are taken into account, the normal cost to the government (15.6 percent of payroll) is two-thirds greater than it would be under a combination of social security and a representative private pension plan (9.4 percent). See Table 14 for comparison of normal costs of retirement alternatives.

Supporters of the present civil service retirement program argue that indiscriminate comparisons should not be made with private sector plans because many include provisions which they consider to be inadequate. Advocates of the current system believe that such CSR provisions as early retirement and full indexation for cost-of-living increases should be adopted by private-sector employers. Viewed from this perspective, the federal system should set an example for rather than be patterned after practices in private industry.

OPTION II: REDUCE EARLY RETIREMENT BENEFITS BY ADOPTING PROVISIONS OF A REPRESENTATIVE PRIVATE PLAN

Option II would remove a significant difference between civil service and private-sector retirement. Civil servants retiring between ages 55 and 65 would have their benefits reduced to reflect a longer pay-out period. Specifically, the pension would be reduced by 3.5 percent for each year from age 64 to 60 and 4.0 percent for each year from age 59 to 55. In addition, eligibility for a deferred pension (referred to as "vesting") would be increased from 5 to 10 years of service, consistent with private-sector practice.

Reduced early retirement annuities would encourage many employees to continue working. Retirement at age 55 would become financially difficult for most employees. It is estimated that the cumulative number of new civil service retirees during the first five years would be about 21 percent less than under the current program. Since retirees would receive benefits over a shorter period of time, normal cost to the government would be 1.6 percent of pay less than under the current system. For the hypothetical civil service retiree, this option would provide retirement income of 69.2 percent of net salary (before retirement and after taxes).

Proponents of the current CSR system have traditionally argued that provisions for early retirement are desirable in view of the rigidity of the civil service system. That is, they believe that a policy of early retirement brings "new blood" into the civil service, expands promotional opportunities for present employees, and creates more jobs. The rigidity of the civil service, however, is now being addressed through reorganization and personnel management measures, hence there may be less justification for maintaining early retirement provisions.

A policy favoring early retirement is costly because of the resulting growth in the number of annuitants and the longer period of time that benefits are received. If early retirement annuities were reduced, annual outlays would be $140 million lower in fiscal year 1980 and $1.4 billion lower in fiscal year 1984 than under the current system. Further, civil service retirement outlays would be substantially lower in the long run: $2.0 billion lower in 1989; $2.9 billion in 1994.

OPTION III: ADOPT STRICTER ELIGIBILITY STANDARDS AND IMPROVE BENEFITS FOR LONG-TERM DISABILITY

Option III would address only the long-term disability provisions of the present system. Stricter eligibility standards would be adopted and the level of disability benefits would be increased. These changes would pattern civil service disability after practices in the private sector.

This option would use the social security eligibility criteria for long-term disability: initial benefits would not be available unless the employee were unable to perform any "substantial gainful employment." 3/ Payments would be suspended if the person were re-employed by either the federal government or another employer. Under this alternative, it is estimated that the annual number of workers disabled in the first five years would be about 20 percent lower. In order to achieve comparability with the private sector, the basis for deter-

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3/ The social security criteria for disability is adopted for this option because of its widespread use. It should be noted, however, that some critics believe existing eligibility for social security disability should be reviewed.

mining disability benefits as well as the eligibility criteria should be modified. Disability benefits for a hypothetical married civil servant would be 73 percent of final salary, as compared with 40 percent under the current system (see Table 4).

This option would have little net effect on normal cost or budget outlays. The savings from a reduced number of disability annuitants (stricter eligibility) would be offset by costs for larger disability annuities and by a corresponding increase in retirement due to age. Budget outlays under this alternative would be about $30 million lower in 1980 and $280 million lower in 1984. By 1994, however, there would be practically no difference in outlays.

OPTION IV: LIMIT COST-OF-LIVING ADJUSTMENTS TO 70 PERCENT OF INCREASES IN THE CONSUMER PRICE INDEX

Option IV would provide federal retirees with cost-of-living adjustments (COLA) equivalent to those available under social security and a representative private pension plan. Consequently, the COLAs for existing and new retirees would be limited to 70 percent of increases in the Consumer Price Index. 4/ With this change, normal cost to the government would decline from 15.6 to 13.1 percent of pay.

This option would greatly reduce budget outlays. In fiscal years 1980 and 1984, annual outlays would be $200 million and $1.4 billion lower, respectively, than the current program. In the long run, the annual reductions would be even more significant--$2.8 billion in fiscal year 1989 and $4.8 billion in fiscal year 1994.

This option offers a relatively easy way to approach comparability with the private sector. The change would affect only the size of future cost-of-living increases for current and new retirees. Initial benefits at the time of retirement would remain unchanged.

4/ For estimating purposes, it is assumed that the new cost-of-living adjustments would take effect in September 1979.

Critics of this option argue that reducing the protection against inflation provided federal retirees would be a step backwards. Nevertheless, limiting COLA to 70 percent of the increase in the CPI would be consistent with the protection afforded private sector employees under social security and a representative employer-provided pension plan. This option would reduce retirees' purchasing power by an estimated 8.2 percent over the next five years under projected inflation rates for 1980-1984.

OPTION V: INCREASE EMPLOYEE CONTRIBUTIONS

Option V would increase employees' contribution from 7.9 to 14.1 percent of pay and would reduce the cost to the government for CSR from 15.6 to 9.4 percent of pay. The 6.2 percentage point increase in employee contributions would dramatically reduce take-home pay. No change would be made in the level of benefits provided; however, the cost to the government would be consistant with employer costs in the private sector.

This option is based upon a belief that differences may exist between civil service and private sector retirement but that the normal cost to the government should be about the same; that is, the government should not pay more--or less--for retirement than it would for social security and a representative private plan.

Since the military and most private plans are noncontributory, opponents of this option argue that the present contribution rate should be reduced rather than increased. It could also be argued that the calculation of normal cost is so dependent on future economic and demographic conditions that it does not provide a sound basis for determining the future level of employee contributions.

This option affects the budget by increasing Treasury revenues rather than by reducing outlays. Additional employee contributions are estimated to increase annual revenues by $3.1 billion in 1980 and $3.8 billion in 1984. In the tenth and fifteenth years (1989 and 1994), the increase in annual revenues are projected at $5.6 billion and $7.6 billion, respectively.

OPTION VI: PROVIDE SOCIAL SECURITY AND REPRESENTATIVE PRIVATE PENSION BENEFITS

Option VI would extend social security to federal employees and require the most complex and dramatic changes in the current system. Under this alternative, the CSR system would be restructured to conform with a representative private sector plan. The combination of social security and a modified CSR system would result in the following major changes:

- Curtailment of early retirements, since benefits would be reduced for those retiring before age 65;
- Reduction in the level of retirement benefits for most civil service retirees and no CSR credit for military service;
- Deferred pensions after 10 rather than 5 years of service:
- Tighter eligibility criteria for disability and improved benefits when combined with social security;
- Full cost-of-living adjustments under social security, and 29 percent of CPI increases under CSR;
- Employee contributions would be about 2.1 percent lower than the current level of 7.9 percent; and
- Continuity of social security coverage for individuals moving between jobs in the federal and nonfederal sectors.

By adopting all of the major features of private sector retirement, the current system would lose its distinction as a so-called staff retirement plan. The normal cost to the government would decline from 15.6 percent of pay to 9.4 percent. For the hypothetical civil servant, the retirement income from social security and a smaller CSR pension would be equivalent to about 63 percent of final salary after taxes, as compared with the 76 percent available under the current program (for a detailed comparison of retirement income, see Table 13).

If Option VI applied only to new civil service employees, its budgetary impact in the first five years would be negligible. In implementing this option, an equitable transition satisfactory to all parties concerned would be very difficult to achieve. If adopted, the changes would most likely be phased in over a period of several years. For estimating purposes, however, it is assumed that civil service employees who retire after September 30, 1979, would receive social security benefits as if they had been covered during their prior years of federal employment. On this basis, the option would result in an estimated net budget loss of $710 million in fiscal year 1980. (A $350 million reduction in budget outlays would be more than offset by a $1.06 billion revenue loss from the lower employee contributions.) Beginning in fiscal year 1982, the combined effect on outlays and revenue would produce a net annual savings of about $300 million. In the tenth and fifteenth year, the net annual savings are projected to be $2.6 billion (1989) and $4.0 billion (1994), respectively. It should be recognized that nearly half of the long-term outlay reductions in this option result from the 70 percent limitation on cost-of-living adjustments for existing and prospective retirees.

The changes in benefits and withholdings under this option would have a widespread impact on internal accounts of the budget, affecting civil service and social security trust funds as well as the budget accounts of agencies that employ federal workers.

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