growth rate of earnings results in a reduction in the growth of Social Security tax revenues. When unemployment rises or when income growth slows, the rate of increase in aggregate wages declines. Under these conditions, Social Security tax receipts can fall below projected levels.

Who Participates

At present, about nine out of 10 wage and salary earners and self-employed persons work in jobs covered by Social Security; most of the remainder are civilian federal workers, some state and local government employees, and persons working for certain not-for-profit organizations.

Benefits go to 35 million retired and disabled workers and to their dependents and survivors. Retired workers, their dependents, and their survivors receive benefits from the OASI trust fund, and disabled workers and their dependents from the DI trust fund. Hospital costs for the elderly and disabled are paid from the HI trust fund. 2/

To be assured of receiving Social Security retirement benefits, a worker must have accumulated a certain number of quarters in employment covered by the system. Under current law, the number of quarters of coverage increases each year until 1991, when the qualifying number will be 40 quarters for persons turning 62 in that year or thereafter. 3/

Disabled workers have a lower required number of quarters of coverage to be eligible for benefits, but they must meet a stricter test of recent work experience. For the young disabled worker under age 24, a minimum of six quarters of coverage within the last 12-quarter period is needed to qualify for benefits.

2/ The HI share of Medicare is financed by a portion of the payroll tax. Physicians' fees are paid from the Supplemental Medical Insurance (SMI) portion of Medicare. These are financed largely from general tax revenues, with only a small amount of expenditures covered by the premiums paid by beneficiaries.

3/ Prior to the Social Security Amendments of 1977, a quarter of coverage was defined as any quarter in which at least $50 in covered wages was earned. In 1981, under current law, each $310 in earnings in a year earns credit for one quarter of coverage, up to four quarters per year. This amount is now wage indexed and adjusted yearly.

How Benefits Are Determined

In order to calculate benefits, a worker's past earnings in covered employment are first adjusted for the growth in money wages since the income was earned (that is, wage indexed) and averaged over all years since 1951, less the five lowest years of indexed earnings. 4/ This computation determines his average indexed monthly earnings (AIME), which is then applied to a progressive benefit formula to derive the worker's primary insurance amount (PIA). The PIA is the benefit a 65-year-old retired worker receives, and it is the basis from which actuarial reductions or increases in benefits are made for early or delayed retirement and from which dependents' benefits are calculated. The formula to determine the PIA is progressive in that it gives persons with lower AIMEs proportionally higher benefits than it gives those with higher AIMEs. 5/

Indexation

To compensate for rises in the cost of living, OASI and DI benefit payments are directly indexed to--that is, they rise automatically with--the rate of increase in the Consumer Price Index (CPI). Each July, Social Security benefit payments increase by the change in the CPI from the first quarter of the previous year to the first quarter of the current year. Social Security benefits were increased 14.3 percent in July 1980, adding nearly $17 billion to outlays in fiscal year 1981.

PLAN OF THE PAPER

Chapter II of this paper presents projections, based on current law, of outlays, income, and trust fund balances for the three funds and details the background and causes of the current OASI problem. A number of short-term

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4/ Under the Disability Amendments of 1980 (P.L. 96-265), the number of years of low earnings disregarded in the calculation of benefits for young disabled workers was reduced. This does not affect the benefit calculations for most beneficiaries, however.

5/ The PIA formula for 1981 under the 1977 amendments is: 90 percent of first $211 of AIME, 32 percent of next $1,063 of AIME, and 15 percent of the remainder. There is a five-year "hold-harmless" transition provision for 1979 through 1983 in the 1977 amendments (applicable only to retired workers) that guarantees retirement benefits paid under this new computation formula not be lower than they would have been under the benefit formula previously in effect.

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financing options are reviewed in Chapter III, including accounting changes such as merging either two or all three of the trust funds, realigning the payroll tax rates among the funds, or allowing interfund borrowing. Other changes considered in Chapter III, such as allowing loans or outright grants from general revenues, or altering the rates of the payroll tax, would involve more basic changes in the structure and mechanics of the system. Beyond the short-run concerns of the OASI trust fund, there are longer-run Social Security issues the Congress will have to deal with in the future; some of these are briefly mentioned in Chapter IV.

BASIS OF THE ANALYSIS

The projected period examined in this paper covers fiscal years 1981 through 1986. The analysis is based in part on a methodology derived by CBO that takes into account recent Social Security program experience. The most recent projections of the elderly and disability-prone populations, and of the disability incidence rates (as determined by the Office of the Actuary at the Social Security Administration) serve as a basis for the estimated level of beneficiaries. In addition, the responsiveness of potential OASI and DI recipients to certain economic conditions affecting their employment and earnings prospects are taken into account, because such circumstances can influence a person's decision to retire.

Payroll tax revenues are projected using a set of econometric models developed by the Social Security Administration. These models estimate amounts of wages covered by Social Security based on information about the unemployment rates, wages and salaries, and proprietary incomes contained in the CBO set of assumptions about the economy, and on the payroll tax provisions that apply for specific years. Income to the trust funds (which is the funds' budget authority) includes the tax receipts, government transfers for certain statutory benefits, and interest income on trust fund assets.

Estimates of both expenditures and revenues are sensitive to underlying economic assumptions. In general, higher inflation leads to higher outlays as the result of the automatic cost-of-living benefit increase (the indexing feature of the Social Security program), and to higher tax receipts as wages rise. The increase in outlays as the result of continued inflation tends to be approximately the same as the increase in revenues, however. Higher unemployment increases outlays because, for many persons who are eligible for Social Security, retirement becomes an attractive alternative to searching for work or taking low-paying or uncertain jobs. Unemployment also lowers tax receipts, since fewer workers are paying the payroll tax. Even small increases in the level of unemployment can seriously diminish the trust fund balances.

The level of the Social Security trust fund balances needed to ensure the short-term solvency of the system is expressed in terms of the balance at the start of the year as a percent of that year's anticipated outlays. For example, if outlays for a given program are expected to be $120 billion over the course of a year, and that trust fund has a balance of $12 billion at the start of the year, the fund's balance as a percent of anticipated outlays is 10 percent. There is some debate about what is the appropriate OASI or DI balance as a percent of outlays to ensure that all benefits can be paid on time. If, however, balances at the start of a fiscal year fall below a level of 9 to 12 percent of that year's anticipated outlays, the fund's reserves might be inadequate at some point during that year to cover all monthly benefit payments, since one month's benefits come to more than 8 percent of the year's expenditures. Clearly, such a situation would result in a monthly cash flow problem for the program. This is the problem that both CBO and the Administration now foresee for the OASI trust fund.

Many analysts contend, however, that maintaining the trust fund at a 9 percent level of outlays--as some of the mixes of alternatives presented in this paper would do--is the bare minimum level that could be considered adequate, and it would not safeguard the system if the economy fluctuates even slightly. If the funds' reserves are to be maintained at higher proportions of anticipated outlays, then a number of options that yield more substantial revenues would have to be implemented.

CHAPTER II. THE SHORT-TERM OASI PROBLEM

Underlying the current financial difficulties of the Social Security trust funds is the system's general inability to respond well to the combination of economic conditions that prevailed in the mid-1970s and that recurred toward the end of the decade--high and rising rates of inflation and unemployment, and low and declining growth in real incomes. The system's vulnerability to such circumstances was evident before the passage of the Social Security Amendments of 1977, and it has again become conspicuous. In light of the moderate economic recovery now foreseen for 1981, a review of the system's past experience, as well as its anticipated needs and ability to meet those needs, can be useful.

BEFORE THE AMENDMENTS OF 1977 AND AFTER

The OASI trust fund entered the decade of the 1970s with reserves exceeding 100 percent of anticipated outlays (see Table 2). These reserves reflected high numbers of contributors relative to beneficiaries. The decline in the initially high trust fund reserves before 1970 was the result of increasingly more covered workers' beginning to collect benefits, and of certain liberalizations in eligibility for and amounts of benefits. The fall in the trust fund balance as a percent of outlays during the early 1970s was caused primarily by very large across-the-board ad hoc benefit increases (15 percent in 1970, 10 percent in 1971, and 20 percent in 1972). With the implementation of the automatic cost-of-living adjustment in 1975, the annual benefit increases have kept pace with, but have not exceeded, the rate of inflation as measured by the CPI.

The Social Security Amendments of 1977 came in response to much the same economic circumstances as now prevail. The round of rapid price increases and declines in real wages following the Organization of Petroleum Exporting Countries' (OPEC) oil embargo in 1973, compounded by the recession of 1974-1975, caused the trust funds' assets to decline during the

TABLE 2. PAST AND PROJECTED ASSETS OF THE OASI AND DI TRUST FUNDS AT THE BEGINNING OF YEAR, AS A PERCENT OF FISCAL YEARS' OUTLAYS: FISCAL YEARS 1960 - 1986

Fiscal Year	OASI	DI	Combined OASI and DI
1960	195	313	200
1965	123	151	126
1970	103	125	105
1971	101	142	105
1972	96	149	101
1973	83	135	89
1974	74	123	79
1975	67	103	71
1976	62	85	65
1977	50	56	51
1978	44	34	42
1979	34	31	34
1980	27	37	28
1981	20	44	23
1982	14	14 b/	14
1983	5	25	7
1984	a/	47	1
1985	a/	72	a/
1986	a/	112	a/

SOURCES: Social Security Administration and CBO.

a/ Negative balance.

b/ Decline reflects reallocation under P.L 96-403, enacted in 1980, of payroll tax revenues from DI to OASI for 1980 and 1981, with the entire reallocation being made during fiscal year 1981.

1974-1976 period. The OASI fund's balance fell from 83 percent of outlays at the start of 1973 to 50 percent at the start of 1977. The DI trust fund declined from 135 percent of outlays at the start of 1973 to 56 percent by the

start of 1977. 1/ This steady erosion continued even though there were major tax increases in 1971 and 1973, as well as increases in the taxable maximum wage base every year after 1971.

Before the amendments' passage, CBO projected that the OASI and DI funds combined would be depleted by fiscal year 1982, with the DI trust fund failing by 1979. Even if there had been a realignment of the OASI and DI tax rates then in effect, the combined assets of the OASI and DI trust funds would not have been able, prior to the passage of the 1977 act, to meet all monthly payments by as early as 1981. 2/

In addition to the large increase in revenues they generated, the 1977 amendments yielded a net savings in outlays, estimated at the time to be more than $500 million in fiscal year 1979 and to total $10 billion by the end of 1983. The major savings feature of the amendments was a provision to correct the technical "overindexing" flaw implemented at the time cost-of-living benefit increases were automatically indexed to rises in the CPI. This "decoupling" provision took effect in June 1979 for all new disability awards. It will be fully effective for all new benefits to retired workers by 1982.

Thus, high automatic and ad hoc benefit increases, high rates of inflation and unemployment, low or negative real wage growth, and increasing income replacement rates, as well as some administrative factors, have affected the OASI trust fund adversely in the past, and many of these factors threaten to do so in future.

1/ The DI trust fund was further tapped by a large influx of recipients attributable to some loosening of administrative procedures and to the implementation of the Supplemental Security Income (SSI) program and Black Lung program for disabled coal miners. This rapid decline in the DI trust fund has been reversed in the last two years, partly by tighter administrative procedures and lessening pressures of the SSI and Black Lung programs. In addition, the reversal in the DI fund's decline may be attributable partly to the lower benefits resulting from the decoupling provision in the 1977 amendments, and to a number of benefit reducing provisions in the Disability Amendments of 1980 (P.L. 96-265).

2/ Under the provisions of the Social Security Amendments of 1977, increases in the payroll tax rate are scheduled at the start of 1982, 1985, 1986, and 1990. See Chapter I, Table 1.

THE PROJECTED OASI PROBLEM

Because current law stipulates that benefits for any Social Security program may be paid only from that program's specifically earmarked trust fund, there must be assets in each fund at the start of any month to cover all anticipated monthly benefit payments. Otherwise, some benefits, scheduled for payment on the third day of each month, will be delayed. Under current estimates, CBO projects this to occur only in the OASI program; the relatively stronger status of the DI and HI trust funds has no direct bearing on OASI's solvency. 3/

CBO projects that, by the start of fiscal year 1982, the balance in the OASI fund will fall to 14.0 percent of the estimated $141.4 billion needed for that year's outlays (see Table 3). Approximately $7 billion is projected to remain in the fund by the end of fiscal year 1982--4.7 percent of the next year's anticipated outlays. 4/ During 1983, the OASI fund is anticipated to be depleted. This represents a steep drop in the balances from the more than 34 percent level of OASI outlays at the start of fiscal year 1979. Additional income raised by scheduled tax increases is not projected to reverse the decline in the OASI balance, which is likely to continue falling as a percent of outlays through 1986. 5/

At the same time, however, the DI trust fund appears to improve its position substantially through 1986, with DI's level of reserves increasing to 112 percent of outlays by then. HI's balance will remain at approximately 50 to 60 percent of outlays over the period.

3/ Technically, the HI trust fund can continue meeting benefit payments with less than one month's anticipated expenditures on reserve, since that fund makes payments throughout the month. It is assumed here, however, that maintaining the HI balance at a 9 percent level is desirable, although the HI trust fund alone never approaches this low level during the period under study.

4/ The most recent Administration estimates available are contained in the Carter Administration's proposed budget for fiscal year 1982. These estimates show that, under current law, the OASI trust fund would fall to approximately 15 percent of outlays at the start of fiscal year 1982 and to 6 percent of outlays one year later.

5/ The decline in the trust fund balance could be reversed by 1990, though only under the assumption of no further serious downturns in the business cycle.

TABLE 3. CBO'S PROJECTIONS OF SOCIAL SECURITY TRUST FUND OUTLAYS, INCOMES a/, AND BALANCES, TO FISCAL YEAR 1986: IN BILLIONS OF DOLLARS

	1981	1982	1983	1984	1985	1986
			Old Age and Survivors Insurance			
Outlays	122.6	141.4	158.7	178.0	199.3	222.6
Income	117.8	129.0	143.0	159.1	181.9	203.7
Year End Balance	19.7	7.4	-8.2	-27.1	-44.5	-63.5
			(As a Percent of Outlays)			
Start of Year Balance	20.0	14.0	4.7	b/	b/	b/
			Disability Insurance			
Outlays	17.5	19.6	21.0	22.7	24.8	27.5
Income	12.6	21.9	26.4	30.0	37.7	44.4
Year End Balance	2.8	5.2	10.6	17.9	30.9	47.7
			(As a Percent of Outlays)			
Start of Year Balance	43.9	14.4	24.6	46.7	72.2	112.1
			Hospital Insurance			
Outlays	27.9	34.1	38.7	44.7	51.9	59.9
Income	31.9	38.3	43.2	48.4	55.5	65.5
Year End Balance	18.5	22.7	27.2	30.8	34.4	40.1
			(As a Percent of Outlays)			
Start of Year Balances	51.9	54.2	58.6	60.8	59.5	57.5

SOURCE: Based on CBO's preliminary economic assumptions.

NOTE: Minus sign denotes a deficit.

a/ Income to the trust funds is budget authority. It includes payroll tax receipts, interest on balances, and certain general fund transfers.

b/ Negative balance.

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CAUSES OF THE PROBLEM

In much the same manner as before the passage of the 1977 amendments, economic growth slowed dramatically in 1979, registering only an 0.8 percent real increase by the end of calendar year 1979; this represented a sharp drop from the previous year's growth of 4.8 percent. Three causes underlay the 1979 slowdown: increased OPEC oil prices, record high interest rates, and generally high inflation. At present, these factors continue to depress real income growth.

Meanwhile, the CPI rose 12.8 percent in 1979 and by an equal rate during fiscal year 1980--the most rapid continuous increase since World War II. Price increases, however, were not uniform in the various components of the CPI. Energy prices jumped dramatically. Large increases were also recorded in home purchase and financing costs, food, and health care. More moderate rises occurred in wearing apparel, household furnishings, entertainment, and transportation costs (excluding gasoline). Money wages, however, rose less than prices, leading to a decline in real average earnings in 1979 and 1980.

Thus, the resulting decline in real average earnings over the past two years has limited the growth in revenues to the trust funds. Because of indexation, high rates of inflation alone mean that future automatic benefit increases will be large. Although revenues tend to increase with inflation by approximately the same amount as outlays, and the trust fund balances tend to remain relatively constant in their absolute dollar amounts, they tend to decline as a percent of outlays. Each additional percentage point increase in the CPI currently adds more than $1.3 billion per year to OASI and DI outlays. In addition, indexed--that is, larger--benefits, once implemented, are paid in each succeeding year, and the rises are compounded in subsequent years, further drawing down the trust funds in the future.

Anticipated Economic Effects

The economy exhibited a mild recession concentrated in the first half of 1980, followed by a stronger-than-expected recovery in the latter half of the calendar year. CBO's projections assume that this recovery will weaken somewhat during the first half of 1981 and then gain momentum. Real GNP declined 0.1 percent in fiscal year 1980, and it is expected to rise by roughly the same percent in 1981. 6/ CBO's trust fund estimates for 1981 reflect the

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6/ See CBO, The Economic Outlook at Midyear 1980, A Report to the Senate and House Committees on the Budget (July 1980). The assumptions used in this analysis have been revised to reflect intervening economic developments.

actual Social Security benefit increase of 14.3 percent payable in July 1980, and a projected benefit increase of approximately 12 percent in July 1981. The unemployment rate is assumed to rise somewhat from its present level of 7.4 percent to nearly 8 percent by the end of 1981.

Even with some improvement in the economy, the reserve positions of the trust funds are expected to weaken in the next two years. High levels of unemployment are expected to put more pressure on the trust funds, as fewer workers contribute payroll taxes, and as a number of older workers retire sooner than they would have were the labor market stronger. Outlays too are sensitive to economic deterioration, in part because high inflation and unemployment make retirement an attractive alternative in poor labor market conditions. As inflation erodes real earnings and as employment prospects diminish, increasing numbers of persons over age 62 elect to retire, increasing the number of beneficiaries and their dependents collecting benefits. 7/

SOCIAL SECURITY'S SENSITIVITY TO ECONOMIC VARIATION

In reality, economic conditions may vary from those assumed. To illustrate the sensitivity of the trust funds' balances to differing economic circumstances, this section examines two alternative economic scenarios and their effects on the trust funds.

Higher Unemployment

The first illustrative path examined supposes the unemployment rate to rise one percentage point higher by the end of 1981 than is now assumed and to remain at that higher level through 1983. Under these circumstances, the OASI trust fund would be in a considerably worse position than is now forecast, since higher levels of unemployment would significantly reduce revenues while somewhat increasing outlays. Under this one-percent-higher unemployment path, the OASI fund's deficit would be $9.7 billion larger than

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7/ A number of studies have demonstrated the sensitivity of the number of beneficiaries to economic conditions. See for example, Lawrence Thompson and Paul Van de Water, The Short Run Behavior of the Social Security Trust Funds and Appendices, Technical Analysis Paper No. 8, Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health, Education and Welfare, July 1976; John Hambor, An Econometric Model of OASDI; Studies in Income Distribution, Social Security Administration, Office of Research and Statistics, November 1978. See also a forthcoming CBO paper on an econometric model of the Social Security system.

is now assumed by the end of 1983, and the DI fund's balance would also fall $2 billion below currently projected levels. A combined OASDHI fund, too, would decline to less than 8 percent of outlays by the end of 1983.

Higher Inflation

The second alternative path assumes that the inflation rate rises for one year to a level one percentage point higher than in the base path and continues rising at a rate one percentage point higher than under the base path. This would result in annual cost-of-living benefit increases of about 13 percent starting in July 1981 instead of the 12 percent increase now projected. Under this one-percent-higher inflation scenario, both the OASI and DI trust funds' balances would remain at about the same absolute dollar levels as under the base path projections. But balances as a percent of outlays could fall to levels lower than those now projected. Whether or not they would depends on the cause of inflation. Inflation resulting from higher labor costs would affect the trust funds less adversely than would, say, inflation caused by rising oil prices. This is because rises in labor costs are more directly reflected in Social Security tax revenues than are such external factors as oil price increases.

Although these economic effects are most detrimental to the OASI trust fund, the DI trust fund would also suffer in any period of combined high inflation and high unemployment by having the growth of its reserves slowed. The reason the DI trust fund can remain sound in generally adverse economic conditions is that, besides increasing the overall payroll tax rates in the 1977 amendments, the Congress also earmarked a larger share of the total payroll tax rate for the DI fund. Subsequent events have slowed the rate of growth in the disability program, however, enabling the DI trust fund to improve its balances substantially. In addition, the Disability Insurance Amendments of 1980 (Public Law 96-265) will result in additional large savings in benefit payments from the DI trust fund.

This surplus in the DI trust fund, however, cannot be reallocated to the OASI fund without new legislation. And, as the following chapter makes clear, even a combined OASDI trust fund would dip below the critical level of reserves during 1982. Thus, the increased allocation of revenues into the DI trust fund enacted in 1977 and savings resulting from the 1980 disability legislation have only drawn more immediate attention to the OASI trust fund's short-run financing problem.

Cyclical Economic Behavior

The higher inflation and higher unemployment paths are meant to illustrate the effect of one isolated change in the economy. In reality,

variations in inflation, unemployment, or real growth can and do occur in combination, moving in the same or in opposite directions as the economy progresses in some cyclical pattern.

The estimates underlying this analysis do not assume a cyclical economic pattern beyond 1982. Once the immediate economic situation is determined, the usual practice in formulating economic assumptions is to "trend out" the relevant economic variables beyond the current period. The economic assumptions now used to estimate the status of the Social Security trust funds project that the economy will recover from the current downturn, and that, after a recovery, no cyclical declines in or expansions of real economic growth will recur.

To see what effect continuing cyclical variations would have on the Social Security trust funds, the Social Security Administration's actuaries have projected the financial status of the funds under two alternative cyclical paths. 8/ The actuaries estimated one cycle in which real GNP grew faster in 1981 than had been assumed for their base projections. This cycle, called a "fast-recovery" scenario, had approximately the same rates of inflation and unemployment for 1981 as in the base set of assumptions. A second, "slow-recovery" cycle had real GNP declining in 1981, while unemployment and inflation were initially higher in 1981 than under the base path. Both cycles exhibited increases and decreases in real GNP, unemployment, and price growth over the remaining years of the forecast, as well as economic conditions that are sometimes higher or lower than in the base period's economic path. (This is what is meant by cyclical behavior.)

The scenarios show that, with any set of plausible economic assumptions, the current problem for 1982 and 1983 in the OASI and a combined OASDI fund appears virtually the same. The longer-term outlook for a combined OASDI funds remains poor. It could worsen considerably if the economy should follow the slow-recovery cyclical path, but under the fast-recovery scenario, balances could improve in some years. By 1990, though, under the fast-recovery path as well as under the slow-recovery path, a combined OASDHI fund would be in a worse financial state than under the base forecast.

8/ See U.S. Congress, Subcommittee on Social Security of the Committee on Ways and Means, Social Security and Economic Cycles (November 12, 1980), committee print.

CHAPTER III. POSSIBLE SOLUTIONS FOR THE NEAR FUTURE

To ensure that the OASI trust fund continues to have adequate reserves, the Congress must take some legislative action within the next year. A number of short-term measures are available that go beyond the payroll tax increases that went into effect on January 1, 1981. Some approaches involve only accounting changes; these would affect neither benefit payments nor scheduled total tax rates. Other short-term options would require more basic changes. These could include changing the method of adjusting benefits for the cost of living, increasing payroll taxes or turning to general revenues to relieve pressure on the trust funds. A quite different set of approaches affecting benefits would involve lowering or taxing them.

The effectiveness of such short-term options varies. Taken alone, most would require further legislative action shortly after they are implemented. All would depend on the behavior of the economy in future years. And none address the longer-term issues that may arise from problems in the design of the system itself. Short-term measures could, in any event, assure present retirees and persons now approaching retirement age of receiving the benefits they expect, and they could give the Congress time to consider more fundamental actions for the longer term. Further, they could help dispel public misapprehensions about the solvency of the system as a whole.

RECENT LEGISLATION--REALIGNING THE PORTIONS OF THE PAYROLL TAX

One accounting change has already been made. During the past session, to forestall the OASI trust fund's financial problems through 1981, the Congress passed legislation to realign the portions of payroll tax revenues flowing to the OASI and DI trust funds for 1980 and 1981. Public Law 96-403 increased the portion of the payroll tax rate earmarked for the OASI fund from 4.33 percent to 4.52 percent in 1980 (retroactive to January 1, 1980) and from 4.525 percent to 4.7 percent in 1981, at the same time reducing the DI portion of the tax by equivalent amounts. Tax revenues into the HI fund were unaffected by the statute.

The net effect of the legislation will be to postpone the expected cash flow problem of the OASI trust fund by approximately one-half year. Without the reallocation, OASI trust fund revenues would have been $7.4 billion lower in 1981 and still another $1.3 billion lower in 1982.

OTHER ACCOUNTING CHANGES

Under current economic assumptions, further accounting changes similar to those provided in Public Law 96-403 would enable all cash benefit payments to continue into 1984, because the total amount on reserve in all three trust funds will be adequate until then. Such options in this category include further realigning the payroll tax portions earmarked for the trust funds, allowing borrowing between the funds (as proposed by the Carter Administration in its budgets for fiscal years 1981 and 1982), and merging the three funds into one combined OASDHI trust fund. None of these measures, if taken alone, would obviate the eventual need for further assistance to the OASI fund.

A combined fund comprising OASI and DI only would only help OASI meet its obligations for an additional three to six months. Such a course would have to be supplemented before the end of 1982. A merger of all three funds into an OASDHI fund would go somewhat farther, providing an adequate balance through 1984. By 1985, however, the balance of an OASDHI fund would fall below 9 percent of anticipated outlays, and the decline is likely to continue in subsequent years (see Table 4). Combined reserves of all three funds are estimated to fall to 7.8 percent of outlays by 1985 and to remain at approximately this level through 1990. With the aggregate balance at such a low level, the need for further Congressional actions could arise again soon.

TABLE 4. PROJECTIONS OF SEPARATE AND COMBINED TRUST FUND BALANCES AT THE START OF YEAR, AS A PERCENT OF OUTLAYS, TO FISCAL YEARS 1986 AND 1990

Trust Fund	1981	1982	1983	1984	1985	1986	1990
OASI	20.0	14.0	4.7	a/	a/	a/	a/
DI	43.9	14.4	24.6	46.7	72.2	112.1	263.6
HI	51.9	54.2	58.6	60.8	59.5	57.5	49.7
OASDI	23.0	14.0	7.0	1.2	a/	a/	a/
OASDHI	27.8	21.0	16.1	12.0	7.8	6.7	8.3

SOURCE: Based on CBO's preliminary economic assumptions.

a/ Negative balance.

It should also be noted, as discussed in Chapter II, that the assumptions underlying the estimates presented here suppose that a cyclical pattern in the economy will not recur over the period 1982-1990. Accordingly, if the combination of high inflation rates, falling or low real wage growth and high unemployment did recur during this period, then the trust funds' short-term problems would probably worsen. Indeed, the sensitivity analysis given in Chapter II shows that, with slightly higher unemployment rates than are now assumed, the balance in a combined OASDHI fund would fall below 8 percent of outlays by the start of 1984 (compared to 12.0 percent under current law), making interfund borrowing alone insufficient to ensure continued timely payment of benefits beyond then. If, on the other hand, the economy experiences rapid growth and slow price increases, then the funds would be in better shape than is now projected. Since recent history has shown a pattern of economic fluctuations, the projections presented here probably give an optimistic picture. Further, the HI fund has an actuarial imbalance: on its present course, its reserve ratio will begin to fall in the late 1980s, and it is projected to be depleted by the end of this century.

Interfund Borrowing

In its 1981 budgetary proposal, the Carter Administration put forth a plan allowing the three Social Security trust funds to borrow from one another when the balance in any one fund falls below a certain level. (A similar though less explicit plan is also contained in the Carter Administration's 1982 proposed budget.) The intent of the proposal was to divert tax revenues from the DI fund (and possibly the HI fund) to the OASI fund without having to increase payroll taxes further. Repayment to the lending fund was to be made when possible, with interest.

As the result of the payroll tax reallocation enacted by the 96th Congress, borrowing by the OASI fund from the DI fund only is no longer feasible according to CBO's estimates. Permitting OASI to borrow from HI as well should be sufficient, though, for an additional two to three years. As Table 4 shows, the OASI fund falls below 5 percent of outlays by the start of fiscal year 1983, while a combined OASDI fund falls to 7 percent of outlays by the start of 1983 and becomes negative a little more than one year later. Interfund borrowing between the three funds to maintain both the OASI and DI funds above the critical level would totally deplete the HI fund during 1985.

To maintain a minimum balance of 9 percent of outlays at the start of each fiscal year, the OASI trust fund would need to borrow a total of nearly $160 billion over the 10-year period 1981 through 1990. However, only about $40 billion of this sum can come from the DI and HI trust funds in 1982, 1983, and through part of 1984 before their combined financial status is jeopardized. Starting in 1984, as a result of the timing of the problem, the

loans from the HI fund to the OASI fund would have to be supplemented by approximately $7 to $10 billion from other sources to maintain all three trust funds' integrity. Over the full 10-year period, approximately $113 billion of the $160 billion needed by the OASI fund can be lent by the DI fund and another $42 billion from the HI fund without these balances' falling below 9 percent of outlays.

Table 5 details the total amount of borrowing CBO projects the OASI trust fund would need each year. During fiscal year 1982, for example, $6.9 billion dollars would have to be transferred to the OASI fund in order to maintain the flow of OASI cash benefit payments. 1/ An additional $17.4 billion would be needed before the end of fiscal year 1983. Table 6 shows that in the first year of borrowing, only $3 billion could come from the DI fund before its balance too falls to a critically low level. The remaining needs would have to be met by the HI trust fund.

Under the Carter Administration's original plan for interfund borrowing, such borrowing would be allowed when the balance of any one fund fell below what was deemed a critical level. The critical level proposed was up to 25 percent of the preceding 12 months' outlays. 2/ The amount of borrowing permitted could vary, but it could not exceed the amount that would raise the borrowing fund's balance to 25 percent of the preceding 12 months' outlays. Repayment, with interest, would be required; it would begin when the balance of the borrowing fund exceeded 30 percent of outlays for the preceding 12 months. According to the plan, the authority to borrow would expire in the year 1991.

CBO estimates that, if the OASI trust fund borrowed enough to maintain a balance at the beginning of the fiscal year equal to 25 percent of the previous year's outlays, roughly $10 billion would have to be borrowed by the start of fiscal year 1982 and $17 billion by the start of fiscal year 1983. Beyond that, the DI and HI trust funds could not support this borrowing plan without additional revenues.

Realigning the Tax Rates or Merging the Funds

Results identical to those achieved by interfund borrowing can be accomplished by further realigning the portions of the payroll tax designated for each trust fund. Increasing the OASI fund's share by roughly one-half of

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1/ These transfers would have to be made during the year shown in the text, but for analytical purposes, it is assumed in the tables that they are credited at the start of the next fiscal year.

2/ Section 101 of H.R. 6652 (96th Congress, 2nd Session).

TABLE 5. PROJECTED BORROWING NEEDED TO MAINTAIN THE OASI TRUST FUND RESERVES AT START OF EACH FISCAL YEAR AT 9 PERCENT OF THAT YEAR'S OUTLAYS, TO FISCAL YEAR 1990: IN BILLIONS OF DOLLARS a/

Fiscal Year	Total OASI Outlays	Trust Fund Balance at Start of Year Under Current Law	Total Amount Needed by Start of Year b/	Borrowing Needed by Start of Year b/ c/
1981	122.6	24.6	11.0	d/
1982	141.4	19.7	12.7	d/
1983	158.7	7.4	14.3	6.9
1984	178.0	-8.2	16.0	17.4
1985	199.3	-27.1	17.9	20.8 e/
1986	222.6	-44.5	20.0	19.5 e/
1987	248.2	-63.5	22.3	21.3 e/
1988	275.5	-86.0	24.8	25.0 e/
1989	305.1	-107.3	27.5	24.0 e/
1990	334.8	-128.9	30.1	24.3 e/
Cumulative Borrowing, 1981-1990				159.2

SOURCE: CBO estimates.

a/ Assumes that this borrowing can be obtained from DI or HI trust funds. During 1984, however, the HI trust fund balance is projected to fall below critical levels, and other revenue sources will have to be found.

b/ Total transfers needed by start of year. These transfers will have to be made, however, during the preceding fiscal year to ensure timely payment of all benefits.

c/ See Table 6 for source of these loans.

d/ No need for borrowing projected.

e/ Hypothetical. HI trust fund balance would fall to very low levels in 1984 and become negative during 1985 if all of these transfers were made.

TABLE 6. PROJECTED AMOUNT AND SOURCE OF POSSIBLE INTERFUND BORROWING NEEDED BY START OF YEAR TO MAINTAIN OASI TRUST FUND AT 9 PERCENT OF ANTICIPATED OUTLAYS, TO FISCAL YEAR 1990: IN BILLIONS OF DOLLARS

Fiscal Year	Amount Needed by OASI Fund Before Start of Year a/	Amount Borrowed by OASI Fund from DI Fund b/	Amount Borrowed by OASI Fund from HI (or Other Source)
1983	6.9	3.3	3.6
1984	17.4	5.3	12.1
1985	20.8	7.1	13.7 c/
1986	19.5	12.7	6.8 c/
1987	21.3	16.6	4.7 c/
1988	25.0	19.6	5.4 c/
1989	24.0	22.6	1.4 c/
1990	24.3	25.9	d/

SOURCE: CBO estimates.

a/ Transfers must be made in preceding year, but for analytical purposes entire amount shown as the amount needed by the start of year.

b/ This borrowing scenario assumes that the transfers would first be made from the DI fund, and any additional transfers would then be made from the HI fund. It assumes that the DI fund's balance never falls below 9 percent of outlays.

c/ Hypothetical. HI trust fund balance would fall to very low levels in 1984 and would become negative during 1985 if these transfers were made.

d/ DI fund could repay HI fund approximately $1.6 billion in this year.

one percent at some expense to the DI fund (0.15 percent) and to the HI fund (0.35 percent) would relieve the OASI fund's problem until 1984. Because they could involve repeated legislative action, however, such reallocations might be a less attractive accounting change than interfund borrowing, which could be carried out on an ad hoc basis for whatever period the legislation stipulated as the three funds' relative positions shift.

A merger of the trust funds to raise OASI's reserve balance could have the same advantage of flexibility as interfund borrowing. On the other hand, critics of both these approaches have argued that a merger, in particular, is a less desirable solution because it could limit the Congress' control over the three trust funds' outlays. By tending to obscure the visibility of the separate programs' accounts, such an amalgamation could create difficulties in identifying the causes and effects of internal fluctuations. This problem could be solved, however, by continuing to maintain three separate accounting systems.

MODIFICATION OF BENEFIT INDEXATION

Modifying the indexing formula used to raise Social Security benefits each year to keep pace with inflation is another way to relieve the pressure on the OASI trust fund. Since 1975, benefit payments have been indexed to increase automatically with rises in the CPI. Under current law, whenever the average rise in the CPI from the first quarter of the previous year to the first quarter of the current year is greater than 3 percent, benefits are raised by the actual first-quarter-to-first-quarter inflation rate. This benefit increase is first credited to the recipients' June benefit, payable in July. The June 1980 benefit increase was 14.3 percent--considerably more than the 7.33 percent average annual increase over the 1975-1979 period. CBO's current projections show an average annual increase from 1981 to 1986 of approximately 9.6 percent (see Table 7 later in this chapter).

The specific index used to compute the cost-of-living benefit increase is the CPI series for urban wage earners and clerical workers. This index measures changes in the price of a fixed "market basket" of commodities and reflects the purchasing patterns of less than 40 percent of the U.S. population. The overall index is a weighted average of the price changes of the commodities in the market basket, with the weights having been determined by consumers' 1972-1973 expenditure patterns.

The acceleration in the rate of inflation over 1979 and 1980 has raised concern that this particular measure of inflation may be overstating the actual increase in the cost of living. The apparent distortion results primarily from the "homeownership cost concept" used in the CPI. This concept treats houses like any other item--that is, as though they were "consumed" in the year they were bought. In fact, the services rendered by a house are consumed over its entire lifetime. Furthermore, a share of a house's purchase price can be viewed as an investment good, rather than as a consumer good. In the past several years, while housing prices have risen substantially, a comparable increase in rental costs has not occurred. In addition, mortgage interest rates have risen sharply over the past two years,

leading to a large increase in this component of the CPI. As a result, recorded housing price rises reflect the increase in shelter use costs, the increase in investment value, and the higher mortgage costs. The inclusion of total house prices in the CPI thus overstates the rise in shelter costs during periods of rapid increase in housing values or mortgage interest rates.

Such overstatements in computing the effects of inflation can be extremely costly in government outlays. The 14.3 percent increase for June 1980 will add nearly $17 billion to outlays in fiscal year 1981 alone. For each one percentage point increase in the CPI in the future, more than $1.3 billion in benefits each year are paid to OASI and DI beneficiaries. In addition, these increased benefits accumulate in successive years, as higher annual inflated levels of benefits are paid and as future cost-of-living increases are compounded on these higher levels. This sensitivity of benefit payments to changes in the CPI means that relatively small problems or errors in the CPI, or other measures of the cost of living, can seriously worsen the financial prospects of the Social Security trust funds.

There are other flaws in the CPI as well that may justify the shift to a modified way of indexing benefits. The CPI has been criticized on several counts: for its failure to account for shifts in consumer buying patterns in response to changing commodity prices, for its failure to adjust adequately for changes in the quality of goods and services, and for its lack of relevance for particular subgroups in the population such as the elderly, who are the primary recipients of Social Security benefits. These problems, however, or others of similar magnitude, affect some other price indexes as well. The CPI is a readily available and accepted price index. The questions to be considered are: What is the function of the index chosen, and what index could best serve that function? These issues are complex and can only be pointed to here. 3/

There are several alternatives the Congress might consider to modify the method of indexing Social Security benefits and, in doing so, to save the system large sums of money over the next five years. In order to compensate for improper measurement of the weights of various components in the index, such as housing costs or the substitution of relatively cheaper goods in the market basket, an alternative index could be used. Or, the Congress could modify—from time to time and in an ad hoc way--the measure of the cost-of-

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3/ For further discussion, see Statement of Lawrence DeMilner, Congressional Budget Office, before the Task Force on Inflation of the House Committee on the Budget, December 14, 1979; and forthcoming CBO study on the CPI and alternative measures of inflation.