# SOCIAL SECURITY

Old-Age, Survivors, and Disability Insurance Program

# SUMMARY OF THE 1983 TRUSTEES REPORT

**JUNE 24, 1983** 

OFFICE OF THE ACTUARY SOCIAL SECURITY ADMINISTRATION

# SUMMARY OF THE 1983 SOCIAL SECURITY TRUSTEES REPORT: OLD-AGE, SURVIVORS, AND DISABILITY INSURANCE PROGRAM

# **EXECUTIVE SUMMARY**

The Social Security Amendments of 1983 have restored the financial integrity of the Social Security cash benefit program for many years into the future. The program is now estimated to be adequately financed during this decade based on all four sets of actuarial assumptions used in the 1983 Trustees Report. On the basis of all but the most pessimistic of the four sets of assumptions used, the program is now estimated to be financially sound over the next 75 years.

This year's short-range projections are in marked contrast to those of the last three years, which indicated that the largest of the Social Security trust funds-the Old-Age and Survivors Insurance Trust Fund-was rapidly nearing a point at which benefits could not be paid on time. Before enactment of the 1983 amendments, the fund assets were adequate to pay OASI benefits through June 1983 only because of temporary legislative changes, including interfund borrowing authority under which loans were made from the Disability Insurance and Hospital Insurance Trust Funds in the latter part of 1982.

As a result of the 1983 amendments, actuarial projections now show that benefits can be paid on time throughout the 1980's and for many years thereafter. However, the trust fund levels are projected to be

relatively low through 1987. Thus if economic conditions during the next few years are worse than those projected under the pessimistic set of assumptions, it is possible for Social Security again to experience financial difficulties in the near future. After 1987 the program's ability to withstand economic downturns is projected to improve steadily. The interfund loans that were made in 1982 are expected to be repaid before 1990 as required by law.

This year's long-range projections are in marked contrast to those of the last decade, which indicated substantial deficits over the 75-year projection period. On the basis of all but the most pessimistic of the four sets of assumptions used to develop the projections, the average yearly income rate would exceed the average yearly cost rate as a percentage of taxable payroll over the next 75 years.

The OASDI program now is in long-range actuarial balance on the basis of the intermediate-B assumptions. This actuarial balance reflects substantial year-by-year surpluses developed during the first half of the 75-year projection period, which slightly outweigh substantial deficits later on. The actuarial balance is a moving average that is recomputed each year, and continuing review of OASDI financing is necessary.

#### 1. INTRODUCTION

Two separate parts of the Social Security cash benefit program pay monthly benefits to workers and their families:

- (1) **Old-Age and Survivors Insurance** (OASI) pays benefits after a worker retires or dies.
- (2) **Disability Insurance** (DI) pays benefits after a worker becomes disabled.

The two parts, OASI and DI, together are referred to as OASDI.

The Social security program is financed essentially on a pay-as-you-go basis. That is, taxes paid into the program currently are used to pay benefits to current beneficiaries. However, Social Security does maintain trust funds that hold all assets not needed currently to pay benefits and administrative expenses. Social Security funds may not be used for any other purpose.

The Secretaries of the Treasury, Labor, and Health and Human Services now serve as trustees of the Social Security trust funds. They report annually to the Congress on the condition of each fund and on projected future results.

The 1983 Annual Report for the OASI and DI Trust Funds is summarized here. The figures given in this summary, on a calendar year basis, are for the program as it is now structured following enactment of the Social Security Amendments of 1983.

Single copies of the complete annual report for OASDI can be obtained without charge from the Social Security Administration, Office of Public Inquiries, 4100 Annex, Baltimore, Maryland 21235.

#### **OASDI Income and Trust Funds**

Most OASDI revenue comes from payroll taxes paid by employees, their employers, and the self-employed. (Additional payroll taxes go into a separate trust fund for the Hospital Insurance (HI) part of Medicare. Because this summary focuses on OASDI, it does not discuss Medicare except in the context of interfund borrowing.)

Table 1 shows the OASDI payroll tax rates for employers and employees, as established by law. Taxes at these rates are paid on each worker's earnings up to \$35,700 in 1983. In future years, this Social Security earnings base will rise as average wages increase. For the self-employed, the 1983 OASDI tax rate is about 1 it times the rate for employees, and after 1983 it is the same as the combined employer-employee rate.

During 1984 a tax credit is allowed to employees to offset the increase of 0.3 percentage points over the 1983 OASDI tax rate. Certain tax credits are also

allowed to the self-employed over the next few years to provide a transition to the new higher rates, and thereafter to provide parity with employees on an aftertax basis.

Table 1.-Payroll Tax Schedule

	Contribution rate (percent of taxab earnings) payable employer and em ployee, each			xable able by d em-
	Year	OASI	DI	Total
1983		4.775	0.625	5.40
1984-87		5.200	0.500	5.70
1988-89		5.530	0.530	6.06
1990-99		5.600	0.600	6.20
2000 & later		5.490	0.710	6.20

The trust funds serve as a contingency reserve to absorb temporary fluctuations in income and outgo. When income exceeds outgo, the excess builds up the trust funds. When outgo exceeds income, the trust funds are drawn down. The trust funds are invested in U.S. government securities bearing rates of interest similar to those for long-term securities issued to the general public.

The exact timing of income and outgo can be important under pay-as-you-go financing. In order to match OASDI income with outgo more closely, in May 1983 the so-called normalized crediting of taxes took effect. This provides that Treasury advances to the Social Security funds each month's payroll tax receipts at the beginning of the month when benefits are paid. The Social Security funds pay interest to Treasury for the extra days the funds have the money.

After 1983, taxation of benefits will provide another significant source of Social Security income. This tax is to be collected by Treasury throughout each year, and paid in advance from Treasury to the Social Security funds every calendar quarter.

The law also permits limited interfund borrowing among the OASI, DI and HI funds through 1987; such loans must be repaid with interest before 1990. Also, OASDI tax rates were recently reallocated between OASI and DI to put both funds in approximately the same financial condition.

#### 2. SOCIAL SECURITY AMENDMENTS OF 1983

During the past year several new laws were enacted that changed the Social Security program. By far the most important of these was the Social Security Amendments of 1983, which followed closely the recommendations of the National Commission on Social Security Reform that had been appointed by the President to find ways to strengthen Social Security financing. The main provisions of the 1983 amendments are listed below.

- 1. Coverage of newly hired Federal employees.
- 2. Coverage of employees of nonprofit employers.
- 3. Ban on termination of coverage of State and local government employees.
- 4. Six-month delay in cost-of-living adjustments.
- Modification of cost-of-living increases during periods of low trust fund balances (stabilizer provision).
- 6. Normalized tax transfers.
- 7. Extension of interfund borrowing authority.
- 8. Elimination of windfall benefits (for workers receiving pensions from noncovered employment).
- 9. Increase in normal retirement age after the year 2000.

- 10. Increase in delayed retirement benefits.
- 11. Reduced withholding rate under the retirement test.
- 12. Taxation of Social Security benefits.
- 13. Changes in tax rate schedule.
- 14. Acceleration of State and local tax collections.
- 15. Increase in benefits for certain surviving, divorced and disabled spouses.
- 16. Change in financing basis of noncontributory military service wage credits.
- 17. Reimbursement of Social Security funds for uncashed checks.
- 18. Change in public pension offset (for spouses with pensions from noncovered employment).
- Taxation of contributions under salary reduction plans.
- 20. Suspension of benefits to certain nonresident aliens.
- 21. Expanded use of death certificates.
- 22. Other changes without significant cost impact, including provision for two more OASDI trustees from outside the government.

#### 3. RECENT FINANCIAL RESULTS

Table 2 presents a summary of 1982 financial results for OASDI, including the cash income (or revenue), outgo (or disbursements or cost), and changes in assets during 1982, with 1981 results shown for comparative purposes.

Table 2.-Results of Financial Operations During 1982 [Billions]

1982 Results			1981 OASDI
OASI	DI	OASDI	Results
\$21.5	\$3.0	\$24.5	\$26.5
123.7	22.0	145.7	139.4 2.2
0.7	0.2	0.9	0.8
125.2	22.1	147.9	142.4
138.8	17.4	156.2	141.0
1.5	0.6	2.1	1.7
1.8 142.1	18.0	1.8 160.1	1.6 144.4
17.5	-5.1	12.4	
0.6	-0.4	0.2	-1.9
22.1	2.7	24.8	24.5
	OASI \$21.5 123.7 0.8 0.7 125.2 138.8 1.5 1.8 142.1 17.5 0.6	OASI DI \$21.5 \$3.0  123.7 22.0 0.8 0.5 0.7 0.2 125.2 22.7  138.8 17.4 1.5 0.6 1.8 (') 142.1 18.0 17.5 -5.1  0.6 -0.4	OASI         DI         OASDI           \$21.5         \$3.0         \$24.5           123.7         22.0         145.7           0.8         0.5         1.4           0.7         0.2         0.9           125.2         22.7         147.9           138.8         17.4         156.2           1.5         0.6         2.1           1.8         (')         1.8           142.1         18.0         160.1           17.5         -5.1         12.4           0.6         -0.4         0.2

'Less than \$0.05 billion.

Note: Components may not add to totals due to rounding.

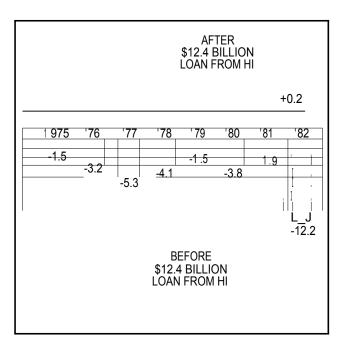
In 1982 interfund borrowing was used for the first time, with OASI borrowing \$17.5 billion from DI and HI in order to pay the November and December 1982 benefits, and to continue all benefit payments through mid-1983.

Administrative expenses for OASDI in 1982 were 1.3 percent of outgo.

Chart A shows that 1982 was the first year since 1974 that the combined OASDI funds increased. However, the 1982 increase of \$0.2 billion includes a \$12.4 billion loan from the HI fund; without this loan the OASDI funds would have decreased by about \$12 billion, or I percent of taxable payroll.

CHART A

# OASDI DEFICITS & SURPLUS, 1975-82 (\$ Billions)



## **4.ACTUARIAL COST PROJECTIONS**

The annual report contains 75-year projections of each fund's estimated financial operations and status. Because precise prediction of the future is not possible, alternative sets of reasonable assumptions are used to make short- and long-range estimates that indicate the trend and general range of future costs. Future costs could, however, fall outside the range indicated by these assumptions.

#### Assumptions Used

Future OASDI income and outgo will depend on mortality, fertility, unemployment, inflation and other economic and demographic factors. Demographic factors affect the numbers of people paying Social Security taxes and receiving benefits, while economic factors affect the levels of these people's wages and Social Security benefits.

This year's cost projections are prepared using four alternative sets of assumptions regarding these factors, called "optimistic", "intermediate-A", "intermediate-B", and "pessimistic" sets of assumptions.

Intermediate-A assumes future economic performance resembling the experience in periods of more robust economic growth, while intermediate-B assumes less robust economic growth. Both intermediate projections use the same demographic assumptions.

Appendix A shows selected values of several assumptions used in the four basic projections, and describes these assumptions more fully.

#### Measures of Actuarial Status

In analyzing the financing status of the program, several measures of actuarial status are commonly used.

The fund ratio is the amount in the trust fund at the beginning of a year expressed as a percentage of that year's expenditures. For example, a fund ratio of 25 percent means that the amount in the fund is one-fourth of annual outgo (or enough to pay benefits for about three months in the absence of any income). At the

beginning of 1983, the fund ratios for OASI and DI were both 15 percent. Of course, the ratio for any year can only be estimated before the year is completed and the amount of expenditures is known. A fund ratio below 8 percent would represent less than one month's benefit outgo, and thus would usually imply inability to pay benefits on time. In practice, to assure payment of benefits in the short range, higher levels would be needed because OASDI income and outgo fluctuate during the year, and because unforeseen changes in the economy may cause the trust funds to drop unexpectedly. A new stabilizer provision takes effect at the end of 1984 to help avoid the need for hasty legislative action to assure payment of benefits on time; should the trust fund ratio fall below 15 percent (20 percent after 1988), annual benefit increases will be based on the lower of wage or price increases, instead of on price increases alone, with provision for higher benefit increases later to catch up with price increases.

The cost rate is the annual outgo or disbursements as a percentage of taxable payroll. Also, the total income rate (or simply the income rate) is the combined OASDI employee-employer payroll tax rate scheduled in the law plus the rate of income from taxation of benefits, expressed as a percentage of taxable payroll. Over a period of time, the average cost and income rates can be compared directly to measure the adequacy of financing. For the entire long-range projection period of 75 years, the actuarial balance is the difference between the average income rate and the average cost rate. If this actuarial balance is positive, the system is said to have an actuarial surplus, and if negative, an actuarial deficit. Such a deficit is a warning that longrange financing may need to be strengthened, although it does not give a complete picture without the other measures of financing discussed here. The program is in "close actuarial balance" over the long-range period if the average income rate is between 95 percent and 105 percent of the average cost rate.

# 5. SHORT-RANGE FINANCING (1983-87)

Projections over the next 5 years are used by the Congress and the Administration to monitor OASDI financing. In this short-range picture, the numbers of persons receiving OASDI benefits can be forecast closely. However, changes in the national economy can have major effects on outgo and income, and are difficult to predict.

This year's report shows that under all four projections OASDI can pay benefits on time throughout this 5-year period. This is in marked contrast to the situation shown in recent years' reports, which indicated that reserves were rapidly being depleted.

Chart B shows the year-by-year OASDI surplus projected during 1983-90 by the intermediate-B assumptions. The amounts shown are lower than they would otherwise be because of repayment during these years of the \$12.4 billion borrowed from HI by the OASDI funds.

CHART B

OASDI SURPLUS, 1983-90 (\$Billions, Projected by Intermediate-B Assumptions)

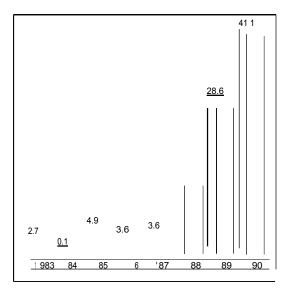
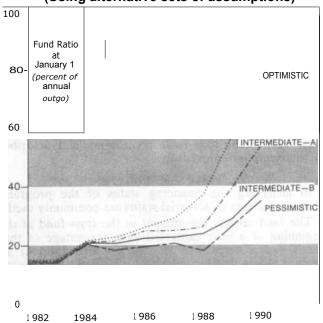


Chart C shows the projected progress of OASDI fund ratios under all four sets of assumptions during 1982-90. As of January 1, 1983, the ratio was 15 percent for OASDI. (Both the OASI and DI fund ratios also

were 15 percent.) During 1983 the fund ratio jumps to the 21-22 percent level, reflecting both the normalized crediting of taxes and a lump sum payment to OASDI for military service credits. Then for several years the OASDI fund ratio is projected to grow slowly, reaching 30 percent between 1988 and 1990. After that, reserves are projected to build up more rapidly, reflecting higher payroll tax rates. Thus during the next few years margins of safety are thin; thereafter the funds are less vulnerable to the adverse effects of an economic downturn.

CHART C

# OASDI FUND RATIOS (Using alternative sets of assumptions)



Under all four sets of assumptions the \$5.1 billion borrowed from the DI fund would be fully repaid, with interest, in 1988 or 1989. The \$12.4 billion borrowed from the HI fund would be fully repaid, with interest, in 1987 or 1988; under the pessimistic assumptions this loan would be repaid in 1987 when needed by the HI fund to pay benefits.

CHART D

Long-range cost estimates for OASDI over the next 75 years, although sensitive to variations in the assumptions, give the best available indication of the trend and general range of the program's future cost. In this long-range period Social Security costs should tend to respond largely to demographic conditions. Most of the beneficiaries during the next 75 years have already been born, so that their numbers are projected. mainly from the present population. The numbers of workers involved in these projections, however, depend on future birth rates, which are subject to more variability. Several important long-range demographic trends, already under way, are anticipated to raise the proportion of the aged in the population in the next 75 years:

- (1) Because of the large number of persons born shortly after World War II, rapid growth is expected in the aged population after the turn of the century.
- (2) At the same time, low birth rates would hold down the number of young people.
- (3) Projected improvements in mortality also would increase the numbers of aged persons.

Table 3 illustrates the improvement in life expectancies that is anticipated, based on the intermediate assumptions.

Table 3.-Past and Projected Life Expectancies'

	At	At birth		At age 65	
Year	Male	Female	Male I	Female	
1940	60.9	65.3	11.9	13.4	
1960	66.6	73.2	12.9	15.9	
1980	69.8	77.5	14.0	18.3	
2000	73.4	81.0	15.7	20.8	
2020	74.4	82.2	16.4	21.7	
2040	75.4	83.3	17.2	22.6	
2060	76.3	84.4	17.9	23.6	
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Life expectancy is the average number of years of life remaining, based on the death rates at each age in the year shown. Rates are based on census data up to 1980, projected beyond 1980 by the intermediate assumptions.

Chart D shows fertility rates from 1940 on, projected over the next 75 years by the three sets of demographic assumptions. The post-World War II baby boom shows up clearly, followed by the historically low fertility rates of recent years.

# TOTAL FERTILITY RATES (Actual and projected)

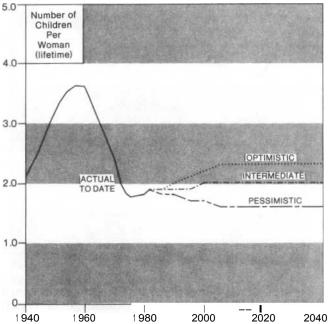
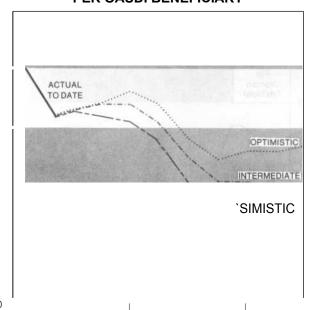


Chart E shows the long-range trend in the number of covered workers for each OASDI beneficiary, based on the three sets of demographic assumptions. ("Beneficiaries" includes not only retired workers, but also disabled workers, spouses, children and survivor beneficiaries.) This ratio has fallen from 5.1 in 1960 to 3.2 currently. It is estimated to reach a level of about 2 by the middle of the next century, as the number of beneficiaries increases more rapidly than the number of covered workers.

## NUMBER OF WORKERS PER OASDI BENEFICIARY



1960 1980 2000 2040 2020 2060 Table 4 shows the trend in the estimated annual OASDI cost rate (outgo as a percentage of taxable payroll) under each of the four sets of assumptions during the next 75 years. Under each set of assumptions, the cost rate increases rapidly after the turn of the century. Under the intermediate and optimistic sets of assumptions, the outgo in relation to taxable payroll is fairly level or decreasing after 2030, while under the pessimistic assumptions the outgo is still increasing at the end of the 75-year period.

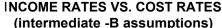
Table 4.-Estimated Long-Range OASDI Cost Rates [Percentage of Taxable Payroll]

	Intermediate Inte	rmediate	
Optimistic	-A	-B	Pessimistic
11.46	11.49	11. <del>4</del> 9	11.62
8.14	9.32	10.08	11.38 11.25
8. <u>22</u> 10.02	19.57	10.31	11.93 15.43
11.00	13.71	14.73	19.43
10.60	14.05	15.17 15.27	21.71 23.82
10.07	14.28	15.42	25.08
	11.46 10.15	Optimistic -A 11.46 11.49 10.15 10.70 8.14 9.32 8.22 9.57 10.02 11.91 11.00 13.71 10.60 14.05	11.46 11.49 11.49 10.15 10.70 11.27 8.14 9.32 10.08 8.22 9.57 10.31 10.02 11.91 12.76 11.00 13.71 14.73 10.60 14.05 15.17

Chart F shows the estimated OASDI cost rates and income rates over the next 75 years based on the intermediate-B assumptions. During the first half of this period the projection shows that income will generally exceed outgo, developing a substantial surplus each year. After about 2020 the reverse is true, with outgo exceeding income and thus generating substantial deficits. Over the entire period such surpluses and deficits are approximately in balance.

After 1990, when the scheduled employee-employer payroll tax rate has leveled off at 12.4 percent, the income rate continues to rise slightly as a result of taxation of benefits-from 12.7 percent in 1990 to 13.2 percent in 2060 under the intermediate-B assumptions.

CHART F



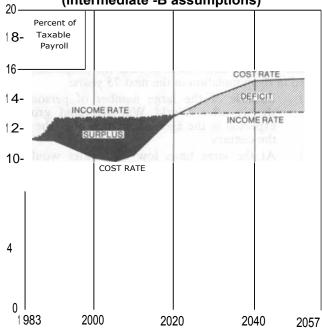


Table 5 compares the estimated OASDI cost rates and income rates for the next 75 years under the four alternative sets of assumptions. The estimated average annual income rate for the entire 75-year projection period exceeds the average annual cost rate for the period by 0.84 percent of taxable payroll under intermediate-A and 0.02 percent under intermediate-B. Thus under intermediate-B the OASDI program now is in close actuarial balance, and has eliminated the large deficit that was projected a year ago.

Table 5.-Estimated 75-Year Average OASDI Cost Rates, Income Rates, Actuarial Balance [Percentage of Taxable Payroll]

Set of assum	otions		Income rate	Cost ra	ite'	Actuarial balance
Optimistic Intermediate-A Intermediate-B Pessimistic			12.73 12.83 12.87 13.04	1 1 1 1	).81  .99  .84  .56	2.92 0.84 0.02 -3.51
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'Cost rate is the estimated outgo as a percentage of taxable payroll.

<sup>2</sup>Actuarial balance is the difference between the income rate and the cost rate before rounding.

Appendix B is an index to certain key tables in the complete annual report for 1983. Other tables in the report give technical data and results by fiscal years.

# **APPENDICES**

# APPENDIX A

# Economic and Demographic Assumptions

The table below shows selected values of several assumptions used in the 1983 OASDI Trustees Report.

	Percentage increase over previous year in average annual-						
Year	i Real ere	Vages n cov- ed em- oyment	Consumer price index	Average percentage unemployed	Total fertility rate2		
		О	ptimistic Ass	sumptions			
1983 1984 1985 1995 2005 & later	3.4 5.7 5.1 3.8 3.6	4.3 5.2 5.3 4.5 4.5	2.5 3.3 3.7 2.0 2.0	10.0 8.6 7.5 4.0 4.0	1.9 1.9 1.9 2.1 2.3		
		Inte	rmediate-A	Assumptions			
1983 1984 1985 1995 2005 & later	3.1 4.8 4.1 3.3 3.1	4.3 5.0 4.8 5.0 5.0	2.7 3.6 4.0 3.0 3.0	10.0 8.8 7.9 5.0 5.0	1.9 1.9 1.9 1.9 2.0		
		Intermediate-B Assumptions					
1983 1984 1985 1995 2005 & later	2.4 4.1 3.7 2.6 2.6	4.6 4.6 5.5 5.5	4.4 5.3 4.0	10.1 9.1 8.3 5.5 5.5	1.9 1.9 1.9 1.9 2.0		
	Pessimistic Assumptions						
1983 1984 1985 1995 <u>2005 &amp; later</u>	0.5 1.7 3.9 2.1 2.1	3.9 4.6 7.4 6.0 <u>6.0</u>	6.4 7.7	10.5 10.5 9.5 6.5 <u>6.5</u>	1.8 1.8 1.8 1.7 1.6		

2005 & later. 2.1 6.0 5.0 6.5 1.6
Gross National Product (the total output of goods and services) expressed in constant dollars. The percentage increase in real GNP is assumed to change after the year 2005. The values for the year 2060 are 3.2, 2.3, 1.9 and 0.8 percent for the optimistic, intermediate-A, intermediate-B, and pessimistic assumptions, respectively.

'The number of children who would be born to a woman in her lifetime based on the birth rates at each age in the year shown (if she were to survive the entire child-bearing period).

# APPENDIX B

Guide To Key Tables in the 1983 Trustees Report for OASDI

Table	Contents of Table	Page in Report
1	Wage Bases and Tax Rates (All Years)	17
10	Economic Assumptions	37
	Demographic Assumptions OASI Estimates (Next 5 Years)	40 47
	DI Estimates (Next 5 Years)	50
	OASDI Estimates (Next 5 Years)	51
	Assets and Interfund Loans (Next 5 Years)	52
	Trust Fund Ratios (Past Years) Cost Rates vs.Income Rates (Next 5 Years)	53 55
	Cost Rates (Past Years)	56
	OAS[ Transactions and Fund (Past and Next 5	
	Years)	60
	DI Transactions and Fund (Past and Next 5 Years).  OASDI Transactions and Fund (Past and Next 5	64
27	Years)	68
27	OASI & DI Cost Rates vs. Income Rates (Next 75	
20	Years)	73
20	Numbers of Beneficiaries and Workers (Next 75 Years)	75
29	OASDI Cost Rates (Next 75 Years)	75 77
30	OASDI Outgo as a Percentage of GNP (Next 75	
24	Years)	78 79
31 32	Actuarial Balance (Next 75 Years) Trust Fund Ratios (Next 75 Years)	80
	Population Projections by Age Groups (Next 75	00
	Years)	.87
	OASDI & HI Trust Fund Ratios (Next 10 Years)	118
Γ2	OASDI & HI Cost Rates vs. Tax Rates (Next 25 Years)	119
F3	BOASDI & HI Cost Rates vs. Tax Rates (Next 75)	
	<u>Years)</u>	121