SOCIAL SECURITY

MEMORANDUM

Date: June 26, 2000 **Refer To:** TCC

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Subject: Long-Range OASDI Financial Effects of the President's Proposal for Strengthening Social Security --INFORMATION

This memorandum provides estimates of the financial effects of the proposal presented in the President's Mid-Session Review of the Fiscal Year 2001 Budget on June 20, 2000. This proposal would require that transfers be made from the General Fund of the Treasury of the United States to the Old-Age and Survivors Insurance (OASI) and Disability Insurance (DI) trust funds for each fiscal year 2011 through 2050. In addition, the President proposes that a portion of the transfers would be invested in corporate equities (stock), up to a limited portion of the total assets of the trust funds.

If transfers were invested only in special interest-bearing obligations (special issues) of the United States Treasury, the date of exhaustion of the combined OASI and DI trust funds would be extended by an estimated 20 years, from 2037 under present law to 2057 under the proposal. The estimated size of the long-range actuarial deficit would be reduced from 1.89 percent of effective taxable payroll under present law to 0.86 percent of payroll under the proposal. All estimates reflect the intermediate assumptions of the 2000 Trustees Report, adjusted to reflect the recent enactment of the retirement earnings test beginning in the year 2000 for persons who have attained their normal retirement age.

In addition to the transfers, the President proposes that up to 15 percent of trust fund assets would eventually be invested in stock. With both the transfers and the

investment in stock, the date of exhaustion of the combined OASI and DI trust funds would be extended by an estimated 26 years, from 2037 under present law to 2063 under the proposal. The estimated size of the long-range actuarial deficit would be reduced from 1.89 percent of effective taxable payroll under present law to 0.48 percent of payroll under the proposal. (Due to interaction among provisions, a complete elimination of the actuarial deficit would require additional OASDI changes that would reduce the present law deficit by up to about 0.75 percent of taxable payroll.) These estimates are based on the intermediate assumptions of the 2000 Trustees Report (adjusted for elimination of the earnings test at the normal retirement age) and other assumptions described below.

The amount of transfer for each year would be based on a calculation of the increase in the combined OASI and DI trust fund assets that would have occurred during fiscal years 2001 through 2015 if all trust-fund assets had been invested in obligations of the United States Treasury. However, actual transfer amounts would be limited to dollar amounts specified in the law, based on projected on-budget surpluses in the President's Mid-Session Review of the FY 2001 Budget.

Base transfer amounts are intended to be equal to the amount by which interest on publicly-held Federal debt would be lower as a result of the OASDI " surplus" during fiscal years 2001 through 2015 than if there had been no such surplus, assuming that all transfers had been invested solely in special issues of the Treasury.

Beginning in the year 2011, 50 percent of the amount transferred would be used to purchase stock and 50 percent would be used to purchase special issues of the Treasury. All dividends would be reinvested in stock. This procedure would continue until the market value of all stock held by the OASDI trust funds reaches 15 percent of total OASDI trust fund assets. Thereafter, the percentage of total trust fund assets that is held in stock would be maintained at 15 percent by buying and selling stock as necessary.

Stock investments would be managed by the private sector. Stock investments would be required to reflect the composition of all publicly-traded stock in the United

States (for example, the composition of the Wilshire 5000 index).

Transfer Amounts from the General Fund of the Treasury to the OASI and DI Trust Funds

The proposal would provide for transfers in each fiscal year 2011 through 2050 with the amount based on the following procedure:

(1) A base amount would be computed for each fiscal year 2011 through 2016 equal to:

(a) the calculated increase in the amount of assets in the combined OASI and DI trust funds that would have occurred from September 30, 2000 to the September 30 immediately prior to the start of the fiscal year, if all assets had been invested only in special issues of the Treasury, multiplied by,

(b) an interest rate based on the average market yield on all marketable interest-bearing obligations of the United States forming a part of the publicly-held debt in the month prior to the fiscal year.

(2) The actual transfer amount for each fiscal year 2011 through 2016 would be equal to the base transfer amount for the year, subject to a dollar-specified limit in the law. This limit, computed by the Office of Management and Budget, represents the amount of on-budget surplus that was projected to be available for transfers to the OASDI trust funds under the assumptions and policy of the President's Mid-Session Review of the FY 2001 Budget.

(3) The actual transfer amount for fiscal years 2017 through 2050 would be equal to the actual transfer amount computed for fiscal year 2016.

Under (1)(b), calculation of the interest rate would be based on yields on corporate bonds if there is no publicly-held debt. In this case, the interest rate would be based on the current market yield of investment-grade corporate obligations, less an adjustment to account for the estimated difference between yields of such corporate obligations and "obligations of comparable maturities issued by risk-free government issuers selected by the Secretary of the Treasury."

Estimated Transfer Amounts and Limits Under the Proposal

Fiscal Year	Estimated Base Amount1/	Dollar-Specified Limit2/	Estimated Transfer Amount
	(billions of current dollars)		
2011	$122.4	$123	$122.4
2012	145.0	147	145.0
2013	169.8	172	169.8
2014	196.7	200	196.7
2015	225.7	230	225.7
2016 &later	257.0	263	257.0

1/ Based on the intermediate assumptions of the 2000 Trustees Report (adjusted for elimination of the earnings test at the normal retirement age).

2/ Specified in law, computed by the Office of Management and Budget based on the President's Mid-Session Review of the FY 2001 Budget.

1,114
+33
X257
8,481

over $9 trillion in today's dollars

It should be noted that the " base" amounts that would be computed for transfers in years 2011 through 2016 may be higher or lower than the estimates provided above based on the intermediate assumptions of the 2000 Trustees Report. For example, if price inflation (increase in the CPI) turns out to be higher or lower than assumed by the Trustees between now and 2015, with real rates of growth as currently assumed, the base transfer amounts could differ substantially.

If inflation is lower than expected through 2015, making base amounts computed in years 2011 through 2016 lower than those estimated above, the dollar-specified limits on transfers would not affect these base amounts in the determination of actual transfers. However, if inflation is higher than expected through 2015, making base amounts computed in years 2011 through 2016 higher than those estimated above, the dollar-specified limits on transfers would reduce the actual transfer amounts to levels below the base amounts.

OASDI Trust Fund Assets in Stock

The 1994-96 Advisory Council on Social Security requested estimates assuming that the total annual real yield on stock investments would ultimately average about 7 percent, approximately the average (geometric mean) total yield on stocks since 1900 (or since 1926). Total yield includes dividends as well as capital gains. Estimates for this proposal are based on this assumption. (See section below for analysis of the sensitivity of the estimates to variation in the assumed real yield on stock.)

The 4-percentage-point difference between this assumed ultimate real stock yield and the Trustees' 3.0-percent assumed ultimate real yield on government bonds held by the trust funds (the equity premium) is assumed to be maintained, on average, throughout the 75-year projection period.

The table below provides the estimated percentage of OASDI trust fund assets that would be held in stock at the end of each calendar year 2010-17. The stock holdings are estimated to reach the level of 15 percent of total trust fund assets by the end of 2017, after which point this percentage would be maintained under the proposal.

Percent of OASDI Trust Fund Assets in Stock, End of Year

2010	0.5%
2011	2.4
2012	4.4
2013	6.6
2014	8.9
2015	11.4
2016	13.8
2017	15.0

The portion of the total value of publicly-traded stock in the United States that is held by the OASDI trust funds will depend not only on the yield achieved in the market, but also on the rate of growth in the total market value of all stock. The total value of stock represented in the Wilshire 5000 index (a fair representation of all publicly-traded stock in the United States) was $9.3 trillion at the beginning of 1998.

Assuming that the total market value of publicly-traded stock will rise on average by the rate of growth in GDP after 1998, the trust funds would be expected to hold about 3.7 percent of the total market value, on average, over the 30-year period 2011 through 2040.

Average Percentage of Total Stock Market Value Held by OASDI

2011-20	2.3%
2011-30	3.5
2011-40	3.7
2011-50	3.6

Sensitivity to Assumed Real Yield on Stock

Due to the current, historically-high, level of stock prices relative to corporate earnings, many analysts expect that the total real yield on stock will average less than 7 percent over the next 75 years. For example, the 1999 Technical Panel appointed by the Social Security Advisory Board recommended the assumption that the ultimate real yield on stock would exceed the real yield on government bonds held by the trust funds by 3 percentage points, on average, over the next 75 years. In the context of the intermediate assumptions of the 2000 Trustees Report, this would imply a long-run average total real yield on stock of 6 percent (3 percentage points above the Trustees' assumption of an average 3-percent real yield on government obligations held by the trust funds).

Assuming a 6-percent average total real yield on stock over the long-range (75-year) period, the estimated year of trust fund exhaustion would be extended by 25 years, from 2037 to 2062 (one year sooner than with an assumed 7 percent real stock yield). The estimated long-range OASDI actuarial deficit would be reduced from 1.89 to 0.57 percent of taxable payroll (0.09 percent of payroll higher than with an assumed 7 percent real stock yield).

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