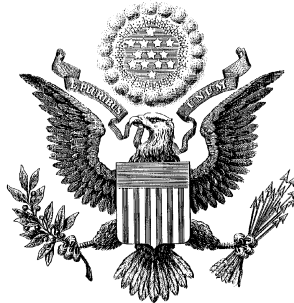


# **PAYROLL TAXES AND THE REDISTRIBUTION OF INCOME**

**A JOINT ECONOMIC COMMITTEE STUDY**



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## **Abstract**

It is misleading to focus on the burden imposed by payroll taxes without accounting for the future benefits they provide through the Social Security program. Low-wage workers, in particular, can expect to receive retirement benefits that exceed the amount of their payroll tax contributions. In contrast, middle- and high-wage workers can expect to pay more into the system than they will receive in benefits. Consequently, the Social Security system redistributes a substantial amount of money from middle- and high-wage workers to low-wage workers. Thus the payroll tax burden should be viewed in the context of lifetime tax payments and Social Security benefits.

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# PAYROLL TAXES AND THE REDISTRIBUTION OF INCOME

The rapid growth in payroll taxes over the past 40 years has imposed a large burden on working Americans. This burden has fallen disproportionately on low-income workers. However, in the context of a comprehensive tax policy, it is misleading to focus on the short-term burden imposed by payroll taxes without accounting for the future benefits they provide through the Social Security program.

Social Security benefits are paid according to a progressive formula that gives low-wage workers a better rate of return on their contributions than it gives high-wage workers. The progressivity of the benefit formula outweighs the disproportionate burden imposed by the tax. As a result, low-wage workers can expect to receive benefits that exceed the sum of their and their employers' payroll tax contributions. Middle- and high-wage workers, on the other hand, can expect to pay substantially more into the system than they will receive in benefits. Thus the Social Security system redistributes income from middle- and high-wage workers to low-wage workers. In addition, many low-wage workers recoup some or all of their payroll tax contributions in the short run through the Earned Income Tax Credit (EITC). Overall, middle- and high-wage workers subsidize the income and payroll tax liabilities of low-wage workers, leaving most low-wage workers with net negative tax liabilities throughout their lifetimes.

## THE SOCIAL SECURITY SYSTEM

The Social Security program was created in the Social Security Act of 1935 to provide benefits for retirement through the partial replacement of workers' incomes. The system is primarily funded through the collection of payroll taxes under the Federal Insurance Contributions Act (FICA) and the Self-Employed Contributions Act (SECA).

### Social Security Taxes

Social Security tax revenue is distributed among three trust funds which finance different tiers of the Social Security system: the old-age and survivors insurance program (OASI), the disability insurance program (DI), and Medicare Part A hospital insurance (HI). The total OASDI portion of the FICA tax is equal to 12.4 percent of the first \$65,400 of wages and the HI tax is equal to 2.9 percent of total wages. The tax is shared by employees and their employers with each paying half of the total percentage. Employers can deduct their share of the contribution for income tax purposes, but workers' shares are not tax deductible.<sup>1</sup>

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<sup>1</sup> SECA imposes an equal tax rate and wage base on self-employed individuals. Self-employed individuals may deduct half of their Social Security tax for income tax purposes to conform with the tax treatment of the employer's contribution under FICA.

## Characteristics of the Social Security Program

### *Self-financing*

The Social Security system is self-financing: payroll taxes are collected from current workers and earmarked to pay benefits for current retirees. This feature of the Social Security program is intended to preserve the integrity of the system by making the payment of retirement benefits a right for every worker who contributes to the system. In other words, payroll financing makes Social Security an entitlement program rather than a welfare program. **Thus, payroll taxes are fundamentally different from other types of taxes because they represent a future payment to the contributor. Senator Daniel Patrick Moynihan (D-NY) has pointed out that “...we refer to them as taxes, as payroll taxes, and yet they are not taxes. They are payments, payments into an insurance fund.”**<sup>2</sup> Accordingly, in 1990, Social Security was removed from the budget so that the system would not be jeopardized by future congressional budget actions.

### *Fairness*

The Social Security system is based on the principle of fairness--those with the greatest financial need should receive larger benefits. The benefits paid to an individual depend on several factors including the worker's average pre-retirement income, age at retirement, and years in the labor force. **For very low incomes, Social Security replaces 90 percent of average earnings. For very high incomes, Social Security replaces 15 percent of average earnings, making the benefit payment formula highly progressive. Thus payroll taxes cannot be viewed in isolation, but must instead be viewed in the lifetime context of tax payments and retirement benefits.**

## PAYROLL AND FEDERAL INCOME TAX LIABILITIES

It is commonly cited that low-income workers pay more payroll taxes than Federal income taxes. However, many low-income workers do not pay any Federal income taxes at all and those who do may have their income tax liabilities partially offset by the EITC. In fact, the EITC also offsets the payroll tax liabilities of very low-income workers, thereby reducing their overall tax burden.

Table 1 outlines the Federal income and payroll taxes paid by hypothetical families with different income levels in 1995. The first column lists the mean income received by each fifth and the top 5 percent of all families. The second and third columns show the family's income and payroll tax liabilities with the payroll tax liability representing the combined employer/employee contribution.<sup>3</sup> The average tax rates shown in the last two columns measure tax liability as a percentage of income. The average tax rate is often used to measure a family's tax burden.

<sup>2</sup> Daniel Patrick Moynihan, "Removing Social Security from the Budget," *Congressional Record*, Vol. S14753, October 9, 1990.

<sup>3</sup> Economists generally agree that the entire burden of the employer's share of the payroll tax is ultimately shifted to workers in the form of lower wages. Therefore, it is appropriate to include the employer's share of the payroll tax when analyzing the burden of the payroll tax.

**Table 1: Personal Tax Liability by Income Level, 1995**

<b>Income<sup>1</sup></b>	<b>Income Tax<sup>2</sup></b>	<b>Combined SS Tax<sup>2,3</sup></b>	<b>Total Tax</b>	<b>Average SS Tax Rate<sup>4</sup></b>	<b>Average Total Tax Rate<sup>4</sup></b>
\$11,265	-\$3,110	\$1,724	-\$1,386	14.2%	-11.4%
25,955	1,273	3,972	5,245	14.2	18.8
40,637	3,611	6,218	9,829	14.2	22.5
59,457	5,636	9,096	14,732	14.2	23.0
119,453	18,927	11,052	29,979	8.8	24.0
204,863	42,305	13,530	55,835	6.4	26.4

Source: JEC Calculations (Income data from the U.S. Census Bureau)

1- Income represents average income for each quintile and top 5% of all families.

2 - Income and Social Security tax calculations assume all income is wage income, family of four, families in the first three quintiles take standard deduction, families in top two quintiles and top 5% take itemized deduction equal to 20% of AGI

3 - Combined employer and employee payroll tax contribution

4 - Amount of employer's share of the payroll tax is added back to income

The table shows that most families pay more payroll taxes than Federal income taxes when the employer's share of the contribution is included. In addition, payroll taxes represent a smaller percentage of income as income increases.

However, the last column shows that when the Federal income tax is included, personal tax liability is highly progressive. The mean income family in the lowest quintile receives an EITC which more than offsets its payroll tax contribution, leaving the family with a negative tax liability. Thus the lowest income families receive tax transfers from the government and the highest income families pay over one-fourth of their incomes in personal taxes. Clearly, middle- and high-income families subsidize the payroll and income tax liabilities of low-income families.

## **MONEY'S WORTH ANALYSIS**

Social Security provides different socioeconomic groups with drastically different rates of return on their contributions. A "money's worth analysis" is often used to compare the net benefits of Social Security for different cohorts of workers. Such analyses are useful in determining which groups fare best under Social Security and whether the program distributes benefits in a manner consistent with the program's goals.

The remainder of this paper presents data from money's worth analyses that evaluate the costs and benefits of Social Security for workers in different income cohorts. The results show that low-wage workers receive more than their money's worth from Social Security. In general, they can expect to recover an amount larger than their combined employee/employer payroll tax contribution. Middle- and high-wage workers, on the other hand, fare relatively poorly under Social Security because they are expected to pay much more into the system than they will receive in

benefits. As a consequence, the Social Security program does redistribute income from middle- and high-wage workers to low-wage workers as the system intended. Thus the redistributive character of the Social Security system must be considered when assessing the burden of the payroll tax.<sup>4</sup>

### Historical Data

Money's worth analyses using historical data have generally reached the same conclusions regarding the redistributive effects of the Social Security system.<sup>5</sup> The Social Security program has been progressive with respect to income or lifetime earnings even when mortality rates differentiated by income, education, marital status, age, race and gender are taken into account. In general, women tend to do better than men, married couples fare better than single individuals, and nonwhites tend to do better than whites. These trends occur primarily because of differences in lifetime earnings and mortality rates among the different groups. Historically, all workers of all income levels have recouped both their share and their employer's share of payroll taxes.

### Future Benefits

Money's worth analyses that project the redistributive effects for future retirees also reach consistent conclusions. Specifically, the system will continue to be progressive, although money's worth will decline over time for all groups due to the nature of pay-as-you-go systems. Low-wage individuals will continue to recoup their payroll tax contributions, but middle- and high-wage individuals are expected to suffer net losses from the program.<sup>6</sup>

Table 2 shows the lifetime value of taxes and benefits discounted to 1985 for various family types with different income levels. The transfer payment (the difference between taxes and benefits) measures the money's worth from Social Security for each group. Clearly, for all family types, money's worth is strongly correlated with income. Low-wage families receive much higher rates of return than high-wage families and the differences are quite substantial.

For instance, for the cohort of workers born in 1945, a single-earner couple earning \$10,000 (with wage growth equivalent to the Social Security Administration's "Average Wage Series"), will pay \$48,951 in taxes throughout its lifetime and receive \$62,679 in benefits. Thus the family receives a transfer payment of \$13,727 from Social Security. In other words, the family's benefit payments exceed their and their employer's payroll tax contribution by \$13,727. In the same cohort, a family earning \$50,000 receives a negative transfer of \$39,750. In other words, the family pays \$39,750 more in taxes throughout its lifetime than it can expect to receive in benefits.

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<sup>4</sup> It should be noted that money's worth analyses incorporate various analytical methods and assumptions specific to the question being studied. For example, the appropriate interest rate used to discount the value of lifetime taxes and benefits depends critically on the particular question the analysis seeks to address. The results presented in this paper are obtained from notable studies that specifically address money's worth comparisons among workers in different income cohorts.

<sup>5</sup> Dean R. Leimer, "A Guide to Social Security Money's Worth Issues," *Social Security Bulletin*, June 22, 1995.

<sup>6</sup> All of the results are limited to the OASI program because few studies have been conducted on the DI program. Including DI would pose additional problems that would compromise the accuracy of the results. OASI represent 84 percent of all Social Security benefit payments and 12.4 percent of the total 15.3 percent payroll tax.

A single-earner couple earning \$30,000 suffers a net loss of \$27,370. Therefore, among single-earner couples, there is a large money transfer from middle- and high-wage workers to low-wage workers. The same trend is evidenced for different family types.

Money's worth ratios decline for the cohort of workers born in 1960, but the system remains progressive. Most families will not recover the full amount of their combined employer/employee contributions. Nonetheless, the negative transfer for low-wage workers is much smaller than for middle- and high-wage workers so that low-wage workers will at least recoup an amount greater than their share of the payroll tax. As Table 2 shows, the difference between transfer payments is quite large for the cohort born in 1960, indicating a substantial redistribution of income from middle- and high-wage workers to low-wage workers. For instance, the \$10,000 two-earner couple with a 50-50 income split is expected to suffer a net loss of \$2,761. Therefore, the couple will recover its share of the payroll tax, but not the employer's share. In contrast, the comparable couple earning \$50,000 will lose almost \$120,000 and the couple earning \$80,000 will lose almost \$200,000.

**Table 2: Money's Worth from Social Security for 1945 and 1960**  
(1985 dollars discounted at rate 3%)

Income	1945			1960				
	\$10,000	\$30,000	\$50,000	\$10,000	\$30,000	\$50,000	\$80,000	
Single-Earner Couple	Benefits	62,679	109,128	100,503	46,546	84,059	76,842	73,522
	Taxes	48,951	136,498	140,253	41,263	123,788	138,302	138,302
	Transfer	13,727	-27,370	-39,750	5,283	-39,729	-61,460	-64,780
Two-Earner Couple (70/30 income split)	Benefits	53,293	96,044	108,428	39,476	73,298	82,004	84,654
	Taxes	48,264	144,760	218,119	40,680	122,038	197,883	243,663
	Transfer	5,029	-48,715	-109,689	-1,204	-48,740	-115,877	-159,009
Two-Earner Couple (50/50 income split)	Benefits	50,936	89,578	109,457	37,630	68,257	81,692	88,200
	Taxes	47,926	143,777	233,433	40,391	121,174	201,956	280,275
	Transfer	3,010	-54,199	-123,975	-2,761	-52,917	-120,264	-192,075

Source: Michael Boskin, Laurence Kotlikoff, Douglas Puffert, and John Shoven, "Social Security: A Financial Appraisal Across and Within Generations," *National Bureau of Economic Research*, April 1986, Tables 3A & B.

Notes: 1. Cohort born in 1945 retires at age 65 in 2010 and cohort born in 1960 retires at age 67 in 2027  
2. Amounts in table represent the present value of benefits, taxes and transfers in terms of 1985 purchasing power  
3. Transfer represents the difference between benefits and taxes  
4. Higher income bracket added for 1960 cohort because of higher personal income tax rate

The transfer payments for the 1945 and 1960 cohorts are illustrated graphically on the next page. The graphs show more clearly the progressivity of the Social Security system. Among the 1945 cohort of workers, low-wage workers will receive small positive transfers while middle- and high-wage workers will receive large negative transfers. For the cohort born in 1960, most workers will receive negative transfers, but the losses are much larger for middle- and high-wage couples. **It is important to note that these results only include a family's payroll tax payments and OASI benefits--they do not include income tax payments or the EITC. As shown in Table 1, many low-wage families recoup the entire sum of their and their employer's payroll tax contributions through the EITC.** Consequently, any benefits they receive from Social Security resemble pure cash transfers rather than insurance benefits. Thus, when income taxes are included, many low-wage workers receive benefits in excess of what is shown through a money's worth analysis.

**Payment Transfers for 1945 and 1960 Cohorts**  
(1985 dollars discounted at rate 3% to 1985)



## CONCLUSION

The Social Security system was designed to provide better rates of return for those with the greatest financial need. Money's worth analyses show that low-wage workers will continue to receive retirement benefits that exceed their payroll tax contributions. In contrast, middle- and high-wage workers are expected to pay more into the system than they will receive in benefits. The net loss for a middle- and high-wage married couple can be as large as \$120,000 and \$200,000 respectively. As a result, the Social Security program generates large income transfers from middle- and high-wage workers to low-wage workers.

In addition, many low-income workers benefit in the short run from the EITC. For the lowest income workers with no income tax liability, the EITC may completely offset their payroll tax liabilities so that any future benefits received through Social Security resemble pure cash transfers rather than insurance benefits.

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