Chapter 6

QUANTITATIVE ANALYSIS

1. Introduction

This chapter contains preliminary quantitative analyses of the tax concepts developed in this report. The analyses are "preliminary" in two senses. First, the information used in simulating the distributions of tax burdens is in preliminary form. Data drawn both from tax returns and from other sources, primarily the Current Population Survey, have been used to construct a simulation of the U.S. population as of 1973. A newly assembled set of statistics, which required extensive computer processing, this data base is being continually reviewed and revised. The possiblity exists that changes, even large changes, may still be necessary to assure the most realistic possible simulation. In continuing work, this data set will be checked and "aged" by a further simulation procedure to represent the 1976 population.

The analyses are preliminary in a second sense. Because the alternative tax proposals being considered are radically different from the present system, it isn't always clear how they should be best compared to one another. Thus, for example, if the decision is made to exclude employee contributions to social security from taxable income, but to

include social security benefits, there would appear to be a decrease in tax for present wage earners and an increase in tax for older, predominantly lower income, taxpayers. A comparison of tax burdens using any given year's data will show this result. However, this gives a misleading impression of the distributional consequences of the change, because present wage earners are future retirees. A more satisfactory comparison would be one which reflected the overall lifetime tax burden of different individuals under the various plans. A continuing effort is underway to develop the most illuminating approach to comparing the different plans.

Section 2 below presents the simulated effects of the alternative plans on the population of taxpayers as it was in 1973. The rates and exemptions under the reformed plans have been calibrated to approximate roughly the same vertical distribution of burdens as existed at that time. While an effort was made to make the tax structure reproduce the results of existing law in 1973 with reasonable accuracy, it was not considered worthwhile to undertake the further refinement which would be desirable in final design. The results will be changed in any event when the 1976 level simulation is complete and comparison is made with 1976 law. In the present exercise, comparisons are all made at 1973 levels and with 1973 law.

One of the most striking results of the simulation is the extent of redistribution within income classes which is revealed. The numbers of gainers and losers are large and the extent of their gains and losses are large. Three observations should be borne in mind in interpreting this result:

First, the nature of the data base being used biases the result in the direction of a finding of extensive redistribution. This is because the individual records in the file of taxpayers in the simulation are artificially constructed from information about different individuals in the taxpayer and Current Population Survey samples. Unfortunately, a perfect matching of information is not permitted by the confidentiality rules governing the use of these data. The alternative of using information from only one source is unsatisfactory because the taxpaying population does not include any information on those who do not presently file tax returns, and tax returns do not contain some of the information which would be required under a radically reformed tax law, while the Current Population Survey cannot attain the reliability of tax data, nor does it provide sufficient numbers of observations on higher income taxpayers.

Second, as was pointed out above the redistributions in question are certainly to some extent between the taxpayer at one point in his life and the same taxpayer at another point. This phenomenon will also tend to bias the results toward a finding of extensive redistribution.

Third, it has been recognized from the outset that significant redistributions of tax burdens would be involved in radical reform. The problems which this creates can be mitigated in part by careful transition rules and in part by a cut in overall tax burdens timed to coincide with the transition.

Section 3 of this chapter presents the equivalent of "burden tables" for the alternative tax plans. Unfortunately, because of the complexity of the differences among the tax bases, these tables cannot be as simple as the familiar ones which show AGI in one column and amount of taxes in the other column. An effort has been made to develop examples which will show the differences among the tax bases. As has been suggested above, further work on this is required.

The tables contained in this chapter are repeated in a statistical annex for easy reference.

2. Simulation of the Income, Consumption and Tax Elements of this Report

The Income Concepts

The first few tables present various definitions of "income" that are used in the computer simulations.

Table 1 describes "adjusted gross income," the broadest before-tax income concept used for the present income tax. Like all of the income concepts, its source is primarily wages and salaries. The remainder, labelled "non-wage AGI" in the table, comes from net self-employment and partnership income, capital income such as interest and dividends, capital gains, and various miscellaneous items, minus certain business expenses. The table shows that "non-wage AGI" is a larger share of adjusted gross income in the highest income classes.

Table 1 also shows the distribution of tax returns by income class, data which are helpful in understanding all of these tables. The income classes in Table 1 are defined in terms of "economic income," the broadest before-tax income concept used in this report. As discussed more fully below, this income concept is even broader than the tax base described in the comprehensive income tax proposal of Chapter 3. Economic income is used as the "classifier" in all the tables in this chapter unless noted otherwise.

Economic income itself is described in Table 2. Again, wages are the largest source of income. Most of the other items in adjusted gross income are also included in economic income and are shown in Table 2 as "other non-wage

Table 1

Adjusted Gross Income

(Present Law Total Income)

Economic Income Class	Number of Tax Returns 1/	Wage and Salary Income	Non-Wage AGI	Adjusted Gross Income
($ 000)	(millions)	(.....$ billions.....)		
Up to 0	0.2	0.2	0.1	0.4
0 - 5	40.9	32.3	13.4	45.7
5 - 10	19.1	90.0	16.1	106.1
10 - 15	15.5	139.8	14.0	153.7
15 - 20	11.6	149.5	14.5	164.1
20 - 30	9.6	164.7	20.5	185.2
30 - 50	3.3	69.9	24.1	94.1
50 - 100	0.89	21.9	20.6	42.5
Over 100	0.35	15.0	15.0	30.0
Total	101.4	683.4	138.3	821.7

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1/ Includes all return units (individuals or couples) whether or not they pay tax or file returns under present law.

Table 2

Economic Income

Economic Income Class	Wage and Salary Income	Transfer Payments	Corporate Retained Earnings	Corporate and Implicit Taxes	Other Non-Wage Economic Income	Minus State & Local Income & Sales Taxes	Economic Income
($ 000)	($ billions)						
Up to 0	0.2	0.2	*	-0.1	-0.9	-0.1	-0.7
0 - 5	32.3	34.0	0.5	1.2	14.5	-0.2	82.2
5 - 10	90.0	21.9	1.3	2.7	26.0	-0.9	141.0
10 - 15	139.8	16.4	1.6	3.3	33.7	-2.7	192.0
15 - 20	149.5	13.0	1.6	3.6	37.3	-3.8	201.3
20 - 30	164.7	11.4	3.0	6.3	51.0	-5.8	230.5
30 - 50	59.9	4.9	4.3	6.5	39.0	-3.8	120.8
50 - 100	21.9	1.4	5.5	5.9	24.7	-1.9	57.5
Over 100	15.0	11.7	10.4	8.8	23.0	-1.6	67.3
Total	683.4	114.9	28.2	38.2	248.2	-20.9	1091.9

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economic income." This column is larger than "non-wage AGI" in Table 1 as a result of the broader definition of income involved.

Some of the more important components of economic income are shown separately in Table 2. "Transfer payments" include means-tested public welfare grants and the excess of accruing claims on future social security benefits over actual contributions (employer and employee). "Corporate retained earnings" represent the income of corporate shareholders; in constructing the simulation of the U.S. taxpayer population these have been allocated to shareholders in proportion to their dividend income.

The next column, "corporate and implicit taxes," requires some explanation. Since the corporate income tax represents before-tax income which would be received by individuals were it not taken by taxation first, this tax is included in before-tax economic income. However, as discussed below, the actual burden of the corporate tax is taken to fall on all capital income and not just on that earned in the corporate form, and this is reflected in the distribution of this tax by income class. Also, some provisions of the tax law change before-tax incomes without the government actually collecting any revenues. These provisions give rise to implicit taxes, examples of which are also discussed

below. Finally, economic income is taken to be net of all State and local taxes. Since property taxes are netted in calculating capital income in the previous columns, only State and local income and sales taxes need to be explicitly subtracted here.

Present Law Tax

Before any tax system using the expanded tax bases can be analyzed, there must be a clear idea of the starting point. This is provided by Table 3, which displays (to the extent possible in the simulation) the progressivity of the present income tax system, and the total amount of revenue that it raises.

The individual income tax is only part of the present tax structure. The proposals in this report would also replace the corporation income tax. The burden of the corporation tax has been assumed to fall evenly on all individual owners of capital. The logic underlying this position is that in a market system capital will be allocated to equalize rates of return. Thus, the corporate tax will cause capital to leave the corporate sector, thereby increasing before-tax rates of return there, and to move to the noncorporate sector, thereby depressing rates of return there. The decline in the return to noncorporate capital is the way in which a tax on one sector becomes borne by all capital.

Table 3

Present Law Tax

Economic Income Class	Individual Income Tax	Corporate Income Tax (Allocated by Capital Income)	Implicit Taxes (See Text)	Total Present Law Income Tax
($ 000)	($ billions)			
Up to 0	0.2	-0.1	*	+0.1
0 - 5	1.6	1.4	-0.2	2.8
5 - 10	8.3	3.1	-0.4	11.0
10 - 15	15.6	3.7	-0.5	18.9
15 - 20	19.0	4.1	-0.5	22.6
20 - 30	25.4	6.6	-0.4	31.7
30 - 50	16.2	6.6	-0.2	22.7
50 - 100	10.2	5.5	+0.3	16.1
Over 100	9.2	7.2	+1.7	18.0
Total	105.7	38.2	+0.0	143.9

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November 8, 1976

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Cases can be constructed in which labor as well as capital income bears the real burden of the corporate income tax, but for the simulations the corporate tax has been allocated in proportion to capital income, with the result shown in Table 3.

The third column of Table 3 shows "implicit taxes." Although small in amount, these taxes illustrate an important phenomenon affecting the progressivity of the tax structure. Implicit taxes are best explained by an example. Present law does not tax the interest on municipal bonds; therefore, a holder of such bonds receives less interest than he might receive if he invested his funds in fully taxable securities. The difference between what he receives and what he could receive is his implicit tax. It is implicit, because no revenue is paid to the U.S. Treasury. It is nonetheless a tax because the bondholder's after-tax income is reduced in the same way as if he paid a tax. Of course the implicit tax may be lower than the actual tax payable on fully taxable bonds, and this is why tax-exempts are attractive to high bracket taxpayers.

Other persons receive benefits from the same transaction. The attractiveness of municipal bonds draws capital out of the private sector, thereby increasing slightly the before-tax returns to investors in other forms of capital. The

increases in their returns are implicit subsidies or negative implicit taxes. If total income is kept constant in the economy, and efficiency losses ignored, the positive and negative implicit taxes must exactly balance in the entire population. However, they need not balance for any particular taxpayer or any income class.

There is an implicit tax corresponding to many tax benefits to capital income in the current tax structure, although only a few have been explicitly included in the initial simulations. Since the advantages of these tax benefits--even after before-tax returns are driven down--are worth more to those in high tax brackets, positive implicit taxes are paid by higher income taxpayers. Therefore, implicit taxes make the present tax structure as measured by effective tax burdens somewhat more progressive than it may at first appear.

Table 4 shows the present effective tax rate -- that is, present law tax divided by economic income -- by income class.

A Proportional Income Tax

Table 5 shows the difference between economic income and comprehensive income, which will be the starting point for developing the tax base used in the comprehensive income tax proposal. The difference represents elements of economic income which are impractical for use on tax returns. Social security benefits and capital gains are included when received

Table 4

Effective Tax Rates Under Present Law

Economic Income Class	Effective Tax Rate (Present Individual, Corporate, and Implicit Taxes as Share of Economic Income)
($ 000)	(Percent)
Up to 0	N.A.
0 - 5	3.4%
5 - 10	7.8
10 - 15	9.8
15 - 20	11.2
20 - 30	13.7
30 - 50	18.8
50 - 100	27.9
Over 100	26.8
Total	13.2

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Table 5

Economic Income and Comprehensive Income

Economic Income Class	Economic Income	Adjustments	Comprehensive Income
($ 000)	($ billions)		
Up to 0	-0.7	+0.2	0.2 1/
0 - 5	82.2	+13.2	95.5
5 - 10	141.0	-13.9	127.2
10 - 15	192.0	-29.9	162.1
15 - 20	201.3	-32.3	169.0
20 - 30	230.5	-34.7	195.8
30 - 50	120.8	-13.5	107.3
50 - 100	57.5	-2.5	55.0
Over 100	67.3	-11.6	55.7
Total	1091.9	-125.1	976.6 1/

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November 8, 1976

1/ Details do not add to total in this row because Comprehensive Income is required to be non-negative on each tax return.

rather than when accrued, and the imputed rental of owner-occupied homes is excluded.

It would be possible to replace the present individual and corporation income tax with a proportional or flat rate tax on individuals, choosing the rate in such a way as to raise the same total revenue. A reasonable exemption could be allowed, per person or per family or both; or exemptions could be eliminated altogether in favor of a lower rate.

The following three versions of a proportional income tax would raise the same revenue as the present structure, using comprehensive income defined in Table 5:

Plan 1. No exemption; tax is 14.9 percent of the base.

Plan 2. Exemption of $1,000 per person (either taxpayer or dependent); tax is 19.1 percent of the base.

Plan 3. Exemption of $1,000 per person and an additional $2,000 per tax return (except separate return of married persons); tax is 23.9 percent of the base.

The results of applying these rates are shown by income class in Table 6. Each of the plans would represent a tax decrease for the highest-income taxpayers, and an increase for those with lower incomes. The third plan, with the largest exemption, offers the closest approximation to the present distribution in the lower and middle classes. But to achieve a close approximation for higher incomes as well, it is necessary to use some form of graduated rates.

Table 6

Distribution of the Tax Burden Under a Proportional Income Tax

Economic Income Class	Amount of Income Tax Under: Present Law	Plan 1	Plan 2	Plan 3
($ 000)	($ billions)			
Up to 0	0.1	*	*	*
0 - 5	2.8	14.2	10.0	4.1
5 - 10	11.0	18.9	16.5	12.5
10 - 15	18.9	24.1	22.5	20.9
15 - 20	22.6	25.1	25.0	25.7
20 - 30	31.7	29.1	31.2	34.4
30 - 50	22.7	16.0	18.4	21.4
50 - 100	16.1	8.2	9.9	12.0
Over 100	18.0	8.3	10.4	12.9
Total	143.9	143.9	143.9	143.9

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November 8, 1976

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The Model Comprehensive Income Tax

Table 7 shows the steps from comprehensive income to the tax base used for the comprehensive income tax proposal.

The first adjustment is to subtract half of child care expenses (up to $10,000 of expenses) and 25 percent of the earnings (in excess of half of child care expenses) attributable to the lesser-earning spouse (up to $10,000 of such wages).

The remaining adjustments (and the rate structure) are designed to result in about the same total revenue, with about the same distribution by income class, as the present tax structure described in Tables 3 and 4. First exemptions of $1,000 per taxpayer and dependent, plus $2,000 per return (half for married persons filing separately) are allowed. The next-to-last column of Table 7 shows the result of this step which yields the base to which the rate schedule is applied in the comprehensive income tax proposal.

The rate structure (for joint returns) is as follows:

Income Bracket	Marginal Tax Rate
$0 - $20,000	22 percent
$20,000-$40,000	32 percent
over $40,000	39 percent

For single returns, or separate returns of married persons, the rates are the same but the brackets are half as

Table 7

Tax Base for
Comprehensive Income Tax Proposal

(1973 Levels)

Economic Income Class	Comprehensive Income	Minus Childcare, Secondary-Worker Exclusions	Exemptions	Comprehensive Income Tax Base
($ 000)	($ billions)			
Up to 0	0.2	-*	-0.1	0.1
0 - 5	95.5	-0.1	-78.1	17.3
5 - 10	127.2	-0.9	-74.9	51.4
10 - 15	162.1	-3.3	-74.8	84.0
15 - 20	169.0	-5.1	-61.5	102.4
20 - 30	195.8	-6.1	-52.1	137.6
30 - 50	107.3	-2.5	-17.8	87.0
50 - 100	55.0	-0.5	-4.8	49.7
Over 100	55.7	-0.3	-1.9	53.5
Total	967.6	-18.7	-366.0	582.9

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November 8, 1976

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wide. "Heads of households," as under present law, pay the average of the amounts they would pay using the single and joint schedules.

The tax raised by this plan, and its distribution by income class, are shown in Table 8, along with the corresponding information for the present tax. Of course, the agreement is only approximate; it could be improved at the cost of greater complexity in the rates.

While the aggregate tax change for each income class is small, the same is not true for each taxpayer. Those whose income is not fully taxed under current law will pay more tax under this comprehensive plan, while others will benefit from the generally lower rates. Also, many will be relieved of the burden of double taxation on corporate income. Tables 9A and 9B show the gainers and losers under the plan. In this simulation about 32 million returns show tax increases, while 59 million returns show tax decreases. When attention is restricted to those whose gain or loss is at least five percent of their present tax (and at least $20) the total changes to 26 returns with such "significant" increases, and 36 with "significant" decreases in tax.

Table 10 shows the distribution of the present tax and proposed tax by filing status (i.e., single or joint) and family size. The net tax changes are also shown, in absolute and percentage terms. In general the differences are

Table 8

Tax Raised by the Comprehensive

Income Tax

Economic Income Class	Present Tax	Proposed Tax	Change in Tax	Change as Percent of Present Tax
($ 000)	($ billions)			(Percent)
Up to 0	0.1	*	-0.1	-84%
0 - 5	2.8	3.8	+1.0	+38
5 - 10	11.0	11.3	+0.3	+2.7
10 - 15	18.9	18.6	-0.3	-1.5
15 - 20	22.6	22.8	+0.2	+0.9
20 - 30	31.7	31.2	-0.5	-1.5
30 - 50	22.7	22.0	-0.7	-3.0
50 - 100	16.1	15.4	-0.6	-4.0
Over 100	18.0	19.4	+1.3	+7.3
Total	143.9	144.5	+0.6	+0.45

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Table 9A

Gainers and Losers

Under the Comprehensive Income Tax

Economic Income Class	Tax Decreases: Number of Returns	Tax Decreases: Amount of Tax Changes	Tax Increases: Number of Returns	Tax Increases: Amount of Tax Changes
($ 000)	(millions)	($ billions)	(millions)	($ billions)
Up to 0	*	-0.2	0.2	0.1
0 - 5	24.2	-1.4	6.8	2.5
5 - 10	12.5	-2.3	6.4	2.6
10 - 15	9.2	-2.4	6.3	2.1
15 - 20	5.5	-1.9	6.1	2.1
20 - 30	5.2	-2.9	4.4	2.4
30 - 50	1.8	-2.8	1.5	2.1
50 - 100	0.4	-2.6	0.5	2.0
Over 100	0.1	-1.5	0.2	2.8
Total	59.0	-18.1	32.3	18.7

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Table 9B

"Significant" Gainers and Losers

Under the Comprehensive Income Tax 1/

Economic Income Class	Tax Decreases: Number of Returns	Tax Decreases: Amount of Tax Change	Tax Increases: Number of Returns	Tax Increases: Amount of Tax Change
($ 000)	(millions)	($ billions)	(millions)	($ billions)
Up to 0	0.02	-0.2	0.15	0.1
0 - 5	8.4	-1.3	6.3	2.5
5 - 10	10.5	-2.3	5.7	2.6
10 - 15	7.0	-2.3	4.8	2.1
15 - 20	4.1	-1.8	4.5	2.0
20 - 30	3.9	-2.8	3.2	2.3
30 - 50	1.4	-2.7	1.2	2.0
50 - 100	0.34	-2.6	0.41	2.0
Over 100	0.08	-1.4	0.20	2.7
Total	35.7	-17.5	26.4	18.4

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1/ Returns for which gain or loss is more than 5 percent of present law tax and more than $20.

Table 10

Comprehensive Income Tax:

Distribution by Filing Status, Family Size

	Present Tax	Proposed Tax	Change	Change as Percent of Present Tax
	($ billions)			(Percent)
Single Returns 1/	27.5	29.8	+2.3	+8.2%
"Heads of Households"	4.4	4.7	+0.4	+8.6
Joint Returns 2/	112.0	110.0	+2.0	-1.8
No dependents	42.4	44.2	-2.0	+4.7
1 dependent	21.6	21.1	-0.5	-2.4
2 dependents	23.0	21.8	-1.2	-5.0
3 or more dependents	25.2	22.9	-2.3	-9.2
All Returns	143.9	144.5	+0.6	+0.45
Taxpayers 65 and over	21.2	24.8	+3.7	+17.4

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1/ Including separate returns of married persons.

2/ Including "certain surviving spouses."

not great, although larger families seem to benefit slightly from the larger exemption in the proposal. Table 10 also shows that taxpayers 65 and over pay a higher tax under the proposal, because of the absence of the extra "age" exemption and the retirement income credit, and because of the inclusion of social security benefits in the tax base.

Table 11 shows an additional item that could be allowed as an adjustment in determining the tax base -- the deduction for charitable contributions. The figures given are an understatement of present charitable giving, since only contributions shown on itemized returns have been included.

The Cash Flow Tax

Table 12 shows the aggregate amount of consumption, taxes, and effective rates of tax defined as the ratio of taxes to the sum of taxes and consumption. In this and the other tables relating to the consumption type cash flow tax, the "income classes" are defined, not by comprehensive income, but by consumption.

Table 13 shows the distribution of the model cash flow tax base. It varies from the comprehensive income base in several ways, most significantly in allowing a deduction for net personal savings. To compensate for this, a smaller exemption is allowed: $2,000 per return, plus $1,000 per dependent (but not the additional $1,000 per taxpayer as in the comprehensive income tax proposal). By comparing Table

Table 11

The Charitable Deduction

Comprehensive Income Class	Deduction Allowed Under Present Law for Charitable Contributions
($ 000)	($ billions)
Up to 0	*
0 - 5	0.3
5 - 10	0.9
10 - 15	1.9
15 - 20	2.4
20 - 30	3.3
30 - 50	2.1
50 - 100	1.1
Over 100	1.4
Total	13.4

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November 8, 1976

Table 12

Effective Rates of Tax Based on Consumption

Current Consumption Class	Consumption	Present Law Taxes (Individual, Corporate, and Implicit	Effective Tax Rate (Taxes as Share of Consumption Plus Taxes)
($000)	($ billions)	($ billions)	(Percent)
Up to 0	-9.1	7.1	N.A.
0 - 5	90.3	6.2	6.4
5 - 10	213.9	27.8	11.5
10 - 15	218.1	38.4	15.0
15 - 20	105.8	23.8	18.3
20 - 30	63.4	19.3	23.4
30 - 50	27.1	12.4	31.4
50 - 100	11.4	7.1	38.4
Over 100	2.7	1.8	39.9
Total	723.7	143.9	16.6

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Table 13

The Cash Flow Tax Base

Current Consumption Class	Number of Returns 1/	Current Consumption	Cash Flow Tax Base
($ 000)	(millions)	($ billions)	($ billions)
Up to 0	4.8	-9.1	2.4
0 - 5	39.9	90.3	32.3
5 - 10	28.8	213.9	155.2
10 - 15	18.0	218.1	187.0
15 - 20	6.2	105.8	103.6
20 - 30	2.7	63.4	71.3
30 - 50	0.7	27.1	36.5
50 - 100	0.18	11.4	17.7
Over 100	0.02	2.7	4.4
Total	101.4	723.7	610.5

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1/ Includes all filing units (individuals and couples) whether or not they pay tax or file returns under present law.

13 with Table 7, one sees that the cash flow base is more evenly distributed than the comprehensive income tax base.

The tax rates of the comprehensive income tax can also be applied to the cash flow tax base, to yield about the same revenue as the present tax with about the same income distribution. Although the cash flow base allows a deduction for savings, it is still about the same size as the comprehensive income tax base because a smaller exemption has been allowed.

Table 14 shows the distribution of the effects of the cash flow proposal. As in the case of the comprehensive income tax plan, the present effective tax rate structure could be reproduced more faithfully by greater complexity in the rate schedule. Tables 15a and 15b show the gainers and losers under the cash flow tax. This time, the gainers include not only those taxpayers whose income is more heavily taxed under present law, but also those who save a larger-than-average share of their incomes.

Table 16 shows the distribution of the cash flow tax by filing status and family size.

3. Comparisons of Tax Liabilities under the Different Plans

The previous section of this chapter was concerned with the simulated distribution of the effects of the tax law changes being considered. In this section the tax liabilities

Table 14

Tax Raised by the Cash Flow Tax

Income Tax

Current Consumption Class	Present Tax	Proposed Tax	Change in Tax	Change as Percent of Present Tax
($ 000)	($ billions)			(Percent)
Up to 0	7.1	0.7	-6.4	-90%
0 - 5	6.2	7.1	+0.9	+15.2
5 - 10	27.8	34.2	+6.4	+23.0
10 - 15	38.4	41.8	+3.4	+8.8
15 - 20	23.8	23.6	-0.2	-0.8
20 - 30	19.3	17.9	-1.4	-7.2
30 - 50	12.4	11.0	-1.5	-11.8
50 - 100	7.1	6.1	-1.0	-14.1
Over 100	1.8	1.6	-0.2	-9.5
Total	143.9	144.0	+0.1	+0.10

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Table 15A

Gainers and Losers

Under the Cash Flow Tax

Current Consumption Class	Tax Decreases: Number of Returns	Tax Decreases: Amount of Tax Change	Tax Increases: Number of Returns	Tax Increases: Amount of Tax Change
($ 000)	(millions)	($ billions)	(millions)	($ billions)
Up to 0	2.9	-6.5	0.2	0.1
0 - 5	17.4	-2.4	15.9	3.3
5 - 10	7.0	-3.6	21.8	10.0
10 - 15	5.4	-4.7	12.6	8.1
15 - 20	2.5	-3.6	3.8	3.4
20 - 30	1.2	-3.6	1.5	2.2
30 - 50	0.4	-2.7	0.4	1.2
50 - 100	0.11	-1.5	0.06	0.5
Over 100	0.008	-0.4	0.012	0.2
Total	36.9	-29.0	56.2	29.2

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Office of Tax Analysis

November 8, 1976

Table 15B

"Significant" Gainers and Losers

Under the Cash Flow Tax 1/

Current Consumption Class	Tax Decreases: Number of Returns	Tax Decreases: Amount of Tax Change	Tax Increases: Number of Returns	Tax Increases: Amount of Tax Change
($ 000)	(millions)	($ billions)	(millions)	($ billions)
Up to 0	0.5	-6.4	0.2	0.1
0 - 5	6.4	-2.3	14.9	3.3
5 - 10	5.8	-3.6	20.6	10.0
10 - 15	4.5	-4.7	11.6	8.0
15 - 20	2.0	-3.6	3.4	3.4
20 - 30	1.0	-3.6	1.3	2.2
30 - 50	0.3	-2.7	0.3	1.2
50 - 100	0.10	-1.5	0.06	0.5
Over 100	0.01	-0.4	0.01	0.2
Total	20.7	-28.7	52.4	29.0

Office of the Secretary of the Treasury
Office of Tax Analysis

November 15, 1976

1/ Returns for which gain or loss is more than 5 percent of present law tax and more than $20.

Table 16

Cash Flow Tax:

Distribution by Filing Status, Family Size

	Present Tax	Proposed Tax	Change	Change as Percent of Present Tax
	(.....$ billions.....)			(Percent)
Single Returns 1/	27.5	30.9	+3.4	+12.4%
"Heads of Households"	4.4	5.2	+0.8	+18.4
Joint Returns 2/	112.0	107.9	-4.1	-3.6
No dependents	42.2	43.4	+1.2	+2.8
1 dependent	21.6	21.2	-0.4	-1.7
2 dependents	23.0	21.7	-1.3	-5.7
3 or more dependents	25.2	21.6	-3.6	-14.3
All Returns	143.9	144.0	+0.1	+0.10
Taxpayers 65 and over	21.2	21.9	+0.8	+3.6

Office of the Secretary of the Treasury
Office of Tax Analysis

November 8, 1976

1/ Including separate returns of married persons.

2/ Including "certain surviving spouses."

of taxpayers in particular situations are examined. The materials presented here are illustrative of the differences among the different tax systems. Since the data are altogether hypothetical, they are analogous to the familiar burden tables.

The Marriage Penalty

A subject of continuing controversy and interest is the division of the tax burdens between married and unmarried individuals. Table 17 shows the excess of the tax a married couple filing a joint return pays over that paid by two single individuals. The left hand column shows the total income of the two. The subsequent columns correspond to different shares of the total income, assumed to be all from wage sources, earned by the lesser earning spouse. For example, the first column shows the case in which one spouse earns all of the income. In that column, we see that married couples pay a lower tax than would a single individual with the same income. This is a result of the more favorable rate structure on the joint return schedule. In the last column is shown the case in which the earnings are derived equally from the wages of both spouses. In this case, the married couple pays a larger tax than the two unmarried individuals together would, with a "marriage penalty" running up to $4,815 at a joint income of $100,000.

TABLE 17

MARRIAGE PENALTIES UNDER 1976 LAW

(THE EXCESS OF THE TAX A COUPLE PAYS WITH A JOINT RETURN OVER WHAT THEY WOULD PAY IF BOTH COULD FILE AS SINGLE)

TOTAL FAMILY INCOME	SHARE OF LESSER-EARNING SPOUSE .0000	.1000	.2000	.3000	.4000	.5000
0.	0.	0.	0.	0.	0.	0.
3000.	-42.	-0.	0.	0.	0.	0.
5000.	-233.	-149.	-69.	12.	87.	130.
7000.	-266.	-137.	-18.	101.	201.	212.
10000.	-383.	-163.	43.	191.	216.	221.
15000.	-527.	-187.	97.	162.	237.	263.
20000.	-762.	-240.	56.	189.	258.	243.
25000.	-1085.	-324.	29.	235.	319.	365.
30000.	-1406.	-442.	13.	320.	497.	565.
40000.	-2013.	-657.	149.	661.	1034.	1188.
50000.	-2697.	-799.	334.	1188.	1743.	1910.
100000.	-6810.	-2532.	605.	2819.	4275.	4815.

Office of the Secretary of Treasury
Office of Tax Analysis

November 10, 1976

Note: All income is assumed to be from wages eligible for the maximum tax. Deductible expenses are 16 percent of income.

Table 18 shows the same data for the comprehensive income tax scheme previously described. In this case, the marriage penalty is almost entirely offset in every instance by the lower inclusion rate allowed for the earnings of the secondary worker of the married couple. This is seen most clearly in the last column. Except for the lowest earning families there is no increase in tax when equal earners marry. As column 1 shows, the differences between married couples and unmarried indiviudals are, in general, reduced under the model tax structure. This is because of the less steep progression of the marginal rates permitted by the broader base. Table 19 shows the same comparisons under the rate schedule in the model cash flow tax.

Lifetime Tax Burdens

As has been suggested in the text of the study, a desirable point of view for assessing the relative burdens among different individuals in the tax system is that of the complete lifetime. The following examples concern the lifetime tax burdens of different individuals who have exactly the same wages during their earning years but who follow different savings strategies. The tables portray a married couple with a single worker who earns $16,000 per year for 40 years. The worker then retires and the couple lives on the savings for exactly 15 further years. Table 20

TABLE 18

MARRIAGE PENALTIES UNDER MODEL COMPREHENSIVE INCOME TAX PROPOSAL

(THE EXCESS OF THE TAX A COUPLE PAYS WITH A JOINT RETURN OVER WHAT THEY WOULD PAY IF BOTH COULD FILE AS SINGLE)

TOTAL FAMILY INCOME / SHARE OF LESSER-EARNING SPOUSE	.0000	.1000	.2000	.3000	.4000	.5000
0.	0.	0.	0.	0.	0.	0.
3000.	0.	0.	0.	0.	0.	0.
5000.	-220.	-137.	-55.	27.	110.	83.
7000.	-220.	-104.	11.	126.	242.	248.
10000.	-220.	-55.	110.	275.	220.	165.
15000.	-420.	-22.	275.	193.	110.	28.
20000.	-920.	-390.	-80.	10.	0.	-110.
25000.	-1460.	-720.	-535.	-422.	-310.	-110.
30000.	-1810.	-880.	-610.	-480.	-260.	-160.
40000.	-2510.	-1490.	-1130.	-610.	-230.	-160.
50000.	-2790.	-1767.	-1405.	-755.	-405.	-195.
100000.	-2790.	-1405.	-405.	-195.	-195.	-195.

Office of the Secretary of the Treasury
Office of Tax Analysis

November 10, 1976

The Comprehensive Income Tax Proposal: Exemptions of $1000 per person plus $2000 per return; also exclude 25 percent of first $10,000 of lesser-earners' wages. Joint rates are 22% on first $20,000; 32% on next $20,000; and 39% on excess. Single rates are the same but with brackets half as wide.

TABLE 19

MARRIAGE PENALTIES UNDER CASH FLOW TAX PROPOSAL

(THE EXCESS OF THE TAX A COUPLE PAYS WITH A JOINT RETURN OVER WHAT THEY WOULD PAY IF BOTH COULD FILE AS SINGLE)

SHARE OF LESSER-EARNING SPOUSE / TOTAL FAMILY INCOME	,0000	,1000	,2000	,3000	,4000	,5000
0,	0,	0,	0,	0,	0,	0,
3000,	0,	49,	99,	148,	154,	138,
5000,	0,	83,	165,	247,	330,	303,
7000,	0,	115,	231,	325,	286,	248,
10000,	0,	165,	330,	275,	220,	165,
15000,	-300,	97,	275,	193,	110,	28,
20000,	-800,	-270,	-180,	-90,	0,	-110,
25000,	-1210,	-545,	-460,	-410,	-360,	-160,
30000,	-1560,	-850,	-580,	-380,	-160,	-160,
40000,	-2260,	-1460,	-1100,	-580,	-300,	-160,
50000,	-2400,	-1597,	-1235,	-685,	-335,	-195,
100000,	-2400,	-1235,	-335,	-195,	-195,	-195,

Office of the Secretary of the Treasury
Office of Tax Analysis

November 12, 1976

The Cash Flow Tax Proposal: Exemptions of $2,000 per return plus $1,000 for each dependent; also exclude 25 percent of first $10,000 of lesser-earners' wages. Joint rates are 22% on first $20,000; 32% on next $20,000; and 39% on excess. Single rates are the same but with brackets half as wide.

presents the case of a couple that allocates 10 percent of wages in each period for deposit in a savings account. Thereafter all interest is left to accumulate in the savings account until retirement after 40 earning years. The associated taxes are paid out of the remaining wages. In the case of an income tax, where taxes are paid on the interest earned in the savings account, the result is a declining level of consumption until the end of the earning years. In the case of the cash flow tax the consumption level is constant throughout the earning years. Upon retirement in each case, the couple chooses the amount of its drawdown of savings to maintain the constant level of consumption for the 15 retirement years.

It should be noted here that this and all the remaining tables of this chapter interpret "present law" to be 1976 law, whereas the reform plans were designed to approximate roughly the distribution of liabilities in 1973. As a result of the tax cuts which have taken place since 1973, 1976 law liabilities will tend to be lower than those under the model taxes. Table 20 shows that the tax burden is clearly lower under present law tax than under either model reform plan. This may be seen either by looking directly at the illustrative tax payments at various ages, shown in the last part of the table, or looking at the consumption levels attained by the couple under the different tax regimes.

Table 20

Married Couple; One Earner; Wages $16,000 Per Year for Forty Years; Deposits $1,600 Per Year in 1/ Savings Account; All Taxes Paid Out of Wages

	Present Law Tax	Comprehensive Income Tax	Cash Flow Tax
Consumption			
Age 20	$12,333	$11,820	$11,734
Age 40	12,081	11,561	11,734
Age 60	11,528	11,075	11,734
Retirement years	10,106	10,106	8,363
Savings account balance			
Age 40	40,188	40,188	40,188
Age 60	115,580	115,580	115,580
Taxes			
Age 20	2,067	2,580	2,666
Age 40	2,319	2,839	2,666
Age 60	2,872	3,325	2,666
Retirement years	0	0	1,743

Office of the Secretary of the Treasury
Office of Tax Analysis

November 12, 1976

1/ Assures a 3% rate of return (before taxes) on all savings. All wealth is consumed evenly over fifteen retirement years.

Table 20 also shows that consumption under the present law tax is greater in every year than under the comprehensive income tax, while it is greater than that under the cash flow tax in most years. Because the earnings in the savings accounts are not taxed at all under the cash flow tax until the proceeds are withdrawn, the level of consumption under the cash flow tax is constant during the working years as well as during the retirement years. Table 20 further suggests that, for this case, the structure of exemptions and rates under the cash flow tax is to the disadvantage of this couple as compared to the exemptions and rates under the comprehensive income tax.

Table 21 gives some summary statistics for the case of a couple who follow a different savings strategy, namely a pattern of savings deposits and withdrawals just exactly timed to allow them to maintain a constant level of consumption throughout their working and retirement years. This table provides a very direct and convenient way of measuring the relative burdens of taxes under the different systems, since the relative burden may be read directly from the level of consumption. The higher is the level of consumption attainable, the lower is the tax burden. In this example, the present law tax burden is somewhat lower than that implied by the model comprehensive income tax, which in turn is lower than that under the cash flow tax.

Table 21

Married Couple; One Earner, Wages $16,000 Per Year
for Forty Years; Consumes at
Maximum Possible Steady Rate Over Entire Lifetime 1/

	Present Law Tax	Comprehensive Income Tax	Cash Flow Tax
Consumption			
All ages	$11,771	$11,345	$11,273
Savings account balance			
Age 40	51,181	49,010	54,929
Age 60	135,271	130,305	157,974
Taxes			
Age 20	2,067	2,580	2,540
Age 40	2,389	2,896	2,540
Age 60	3,020	3,420	2,540
Retirement years	0	0	2,540

Office of the Secretary of the Treasury
Office of Tax Analysis

November 12, 1976

1/ Assumes a 3% rate of return (before taxes) on savings.

Illustrative Taxpayer Situations

The next set of tables presents 19 examples of tax liabilities for various illustrative taxpaying families. The 19 examples basically represent seven different situations at various levels of family income.

In all of the situations, the family consists of two adults and two dependent children, at least one being of preschool age. The situations differ with respect to:

1. the sources of income (cash wages, wages in the form of pension contributions, dividends, tax-exempt interest, and pension income);
2. whether neither, one, or both adults have wage income;
3. whether the family itemizes deductions or uses the standard deduction, which depends (except at low income levels) on whether the family owns or rents its home; and
4. whether the family saves some of its income or not.

In cases 1 through 6, the total economic income of the family is assumed to be $16,000 which is approximately the median income of U.S. families. In addition, for each of these cases, two additional variations are shown: families at half the median income ($8,000) and families at twice the

median income ($32,000). In these variations, the relative distribution of income and expense items is assumed to be the same as in the basic case; thus, for a family with income of $32,000, each expense item is doubled.

In cases 1 and 2 (Tables 22 and 23), all earnings are in cash and there are no pension plan savings. In case 1, one spouse earns all of the income; whereas in case 2, each spouse earns half of the family's income. Otherwise, the two cases are identical. These two cases approximate the circumstances of few persons because most workers are covered by social security, but they do illustrate what would happen to persons who consume all of their incomes. Cases 1 and 2 show that families who are saving little or nothing would probably have substantial tax increases under the model cash flow tax. For example, the taxes for a one-earner family with $8,000 in income would quadruple from $194 to $817; and for the two-earner family, tax would increase from $94 to $521. At higher income levels, the increases would be more moderate, about 25 to 50 percent. The comprehensive income tax would produce a change in taxes that is not nearly so large nor so predictable in direction. For the one-earner family, taxes rise at lower income levels and fall at upper income levels; at $8,000 the increase is 10 percent; and at $32,000, the increase is less than 1 percent. Above about

Case 1

One Earner; Homeowner; Itemizer;
Only Cash Wage Income; No Saving

	Present Law Tax	Comprehensive Income Tax	Cash Flow Tax
At Total Income of $16,000			
Money Wages	$16,000	$16,000	$16,000
Exclusions	---	---	---
Adjusted income	16,000	16,000	16,000
Deductions			
Medical	800	---	---
Taxes	600	---	---
Interest	1,200	1,200	---
Contributions	200	200	200
Casualty	---	---	---
Miscellaneous 1/	200	200	200
Total	3,000	1,600	400
Exemptions	3,000	6,000	4,000
Taxable income	10,000	8,400	11,600
Personal tax	1,820	1,806	2,494
Credits	180 2/	---	---
Net tax	1,640	1,806	2,494
At Total Income of $8,000			
Taxable income	2,900	1,200	3,800
Personal tax	434	258	817
Credits	140 2/	---	---
Net tax	194	258	817
At Total Income of $32,000			
Taxable income	23,000	22,800	27,200
Personal tax	5,340	5,196	6,604
Credits	180 2/	---	---
Net tax	5,160	5,196	6,604

Office of the Secretary of the Treasury
Office of Tax Analysis

November 8, 1976

1/ Union dues.
2/ Per exemption credit or taxable income credit.

Table 23

Case 2

Two Equal Earners; Homeowners; Itemizer;
Only Cash Wage Income; No Saving

	Present Law Tax	Comprehensive Income Tax		Cash Flow Tax	
	Husband & Wife	Husband	Wife	Husband	Wife
At Total Income of $16,000					
Money Wages	$16,000	$8,000	$8,000	$8,000	$8,000
Exclusions 1/	---	2,750		2,750	
Adjusted income	16,000	13,250		13,250	
Deductions					
Medical	800	---		---	
Taxes	600	---		---	
Interest	1,200	1,200		---	
Contributions	200	200		200	
Casualty	---	---		---	
Miscellaneous 2/	200	200		200	
Total	3,000	1,600		400	
Exemptions	3,000	6,000		4,000	
Taxable income	10,000	5,650		8,850	
Personal tax	1,820	1,215		1,903	
Credits	580 3/	---		---	
Net tax	1,240	1,215		1,903	
At Total Income of $8,000					
Taxable income	2,900	0		2,425	
Personal tax	434	0		521	
Credits	340 3/	0		0	
Net tax	94	0		521	
At Total Income of $32,000					
Taxable income	23,000	18,300		22,700	
Personal tax	5,340	3,935		5,164	
Credits	980 3/	0		0	
Net tax	4,360	3,935		5,164	

Office of the Secretary of the Treasury
Office of Tax Analysis

November 8, 1976

1/ 50% of child care and 25% wife's wage income (net of child care deduction).

2/ Union dues.

3/ Child care credit, $400 (20% of $2,000); and personal exemption credit or taxable income credit, $180. At the $8,000 level, child care expenses are $1,000; at $32,000, child care expenses are $4,000.

$35,000, taxes would actually fall. For the two-earner family, taxes fall at all levels. At the $8,000 income level, the decrease is $94 or 100 percent; at $16,000, the fall is $25 or 2 percent; and $32,000 the decrease is $423 or 10 percent.

These first two cases illustrate one of the main side effects of developing broad-based taxes with tax rates that are designed to maintain approximately the present aggregate tax burdens for each income class. Rates under the proposed taxes must raise the amount of revenue that is raised under present law by both the personal and the separate corporate income tax. The combination of (1) eliminating the corporate tax and (2) adjusting rates to maintain aggregate tax burdens for each income class tends to reduce taxes on persons whose income is from property and to raise taxes on those whose income is predominantly from personal services. Thus, the hypothetical wage-earning families in cases 1 and 2 have tax increases. The only instance of tax reduction in these cases is due to the revised, and more generous, tax treatment of the two-earner family. It is not a consequence of base broadening or corporate tax integration.

Cases 3 and 4 (Tables 24 and 25) most nearly represent typical taxpayers. Income is from (1) wages and salaries, (2) employer contributions to social security and private

Table 24

Case 3

One Earner; Homeowner; Itemizer; Cash and Pension Wage Income; Only Pension Saving

	Present Law Tax	Comprehensive Income Tax	Cash Flow Tax
At Total Income of $16,000			
Money wages	$12,357	$12,357	$12,357
Accrual of Social Security retirement benefits	1,866	1,866	1,866
Employer private pension cont.	494	494	494
Earnings on accumulated private pension contributions 1/	1,283	1,283	1,283
Total	16,000	16,000	16,000
Exclusions	3,643 2/3/4/	2,360 2/3/5/	3,643 2/3/4/
Adjusted Income	12,357	12,917	12,357
Deductions			
Medical	800	---	---
Taxes	600	---	---
Interest	1,200	1,200	---
Contributions	200	200	200
Casualty	---	---	---
Miscellaneous 6/	200	200	200
Total	3,000	1,600	400
Deductible saving 5/	---	---	723
Exemptions	3,000	6,000	4,000
Taxable income	6,357	5,317	7,234
Personal tax	1,068	1,143	1,555
Corporate tax 7/	192	0	0
Gross tax	1,260	1,143	1,555
Credits	140 8/	0	0
Net tax	1,120	1,143	1,555
At Total Income of $8,000 9/ 10/			
Taxable income	823	0	1,376
Personal tax	115	0	296
Corporate tax 7/	92	0	0
Gross tax	207	0	296
Credits	115	0	0
Net tax	92	0	296
At Total Income of $32,000 9/			
Taxable income	15,529	18,384	18,834
Personal tax	3,142	3,953	4,049
Corporate tax 7/	592	0	0
Gross tax	3,734	3,953	4,049
Credits	180 8/	0	0
Net tax	3,554	3,953	4,049

Office of the Secretary of the Treasury
Office of Tax Analysis

November 10, 1976

Footnotes for Case 3

1/ Assumptions: for 20 years, the taxpayer has been receiving earned income of the same amount as in the current year; during that entire period the employer and employee have each paid a FICA tax of 5.85 percent of the first $15,300 of earning and the employer has paid 4 percent of earnings less the $15,300 and 9.85 percent of the excess into a private pension fund; and the accumulated contributions earn 7.06 percent per annum before a 15 percent corporate tax which falls on all property income, or 6 percent net of the corporate tax.

2/ Accrual of Social Security retirement benefits.

3/ Sum of employer pension contributions.

4/ Earnings on accumulated pension contributions.

5/ Employee FICA: 5.85 percent of money wages up to $15,300.

6/ Union dues.

7/ Under present law, 15 percent of earnings on accumulated private pension contributions.

8/ Personal exemption credit or taxable income credit.

9/ Same relative distribution of income and deduction items.

10/ Uses the standard deduction.

Table 25
Case 4

Two Earners; Homeowner; Itemizer; Cash and Pension Wage Income; Only Pension Saving

	Present Law Tax	Comprehensive Income Tax		Cash Flow Tax	
	Husband & Wife	Husband	Wife	Husband	Wife
At Total Income of $16,000					
Money wages	$12,514	$6,257	$6,257	$6,257	$6,257
Accrual of Social Security retirement benefits	1,686	843	843	843	843
Employer private pension cont.	500	250	250	250	250
Earnings on Accumulated Private Pension contributions 1/	1,300	650	650	650	650
Total	16,000	8,000	8,000	8,000	8,000
Exclusions	3,486 2/3/4/	5,232 2/3/5/6/		5,800 2/3/4/5/6/	
Adjusted income	12,514	10,768		10,200	
Deductions					
Medical	800	---		---	
Taxes	600	---		---	
Interest	1,200	1,200		---	
Contributions	200	200		200	
Casualty	---	---		---	
Miscellaneous 7/	200	200		200	
Total	3,000	1,600		400	
Deductible saving 6/	---	---			
Exemptions	3,000	6,000		4,000	
Taxable income	6,514	3,168		5,068	
Personal tax	1,098	681		1,090	
Corporate tax 8/	195	0		0	
Gross tax	1,293	681		1,090	
Credits	540 9/	0		0	
Net tax	753	681		1,090	
At Total Income of $8,000 10/ 11/					
Taxable income	908	0		330	
Personal tax	127	0		71	
Corporate tax 8/	94	0		0	
Gross tax	221	0		71	
Credits	127 9/	0		0	
Net tax	94	0		71	
At Total Income of $32,000 10/					
Taxable income	16,774	13,242		14,966	
Personal tax	3,477	2,847		3,218	
Corporate tax 8/	401	0		0	
Gross tax	3,878	2,847		3,218	
Credits	980 9/	0		0	
Net tax	2,898	2,847		3,218	

Office of the Secretary of the Treasury
Office of Tax Analysis

November 11, 1976

Table 25 (cont.)

Footnotes for Case 4

1/ Assumptions: for 20 years, the taxpayer has been receiving earned income of the same amount as in the current year; during that entire period the employer and employee have each paid a FICA tax of 5.85 percent of the first $15,300 of earning and the employer has paid 4 percent of earnings less the $15,300 and 9.85 percent of the excess into a private pension fund; and the accumulated contributions earn 7.06 percent per annum before a 15 percent corporate tax which falls on all property income, or 6 percent net of the corporate tax.

2/ Accrual of Social Security retirement benefits.

3/ Sum of employer pension contributions.

4/ Earnings on accumulated pension contributions.

5/ 50 percent of child care expenses ($2,000 x 50% = $1,000);and 25 percent of the first $10,000 of wife's money income net of the child care deduction. At $8,000 level, child care expenses are $1,000; at $32,000, the child care expenses are $4,000.

6/ Union dues.

7/ Employee FICA: 5.85 percent of money wages up to $15,300.

8/ Under present law, 15 percent of earnings on accumulated private pension contributions.

9/ Child care credit, $400 (20% of $2,000); and personal exemption credit or taxable income credit of $140.

10/ Same relative distribution of income and deduction income.

11/ Uses the standard deduction.

pension plans, and (3) the taxpayer's share of pension plan earnings. In case 3, one spouse earns all the income; in case 4, each spouses earns half the income. Otherwise, the two cases are the same. The family owns its home. The family itemizes deductions under present law, except in the case of the $8,000 income family, which has lower tax with the standard deduction. These two cases also illustrate how the present corporate tax (which is assumed to reduce proportionately all income from property) affects the tax liability of each family. The corporate tax attributed to these families is the amount by which the after-tax earnings on their share of pension funds are reduced by the effects of the corporate income tax.

Saving, in cases 3 and 4, consists of (1) accrued increases in the value of the family's social security retirement benefits, [1/] (2) the employer's contributions to a private pension plan, and (3) earnings on accumulated, prior private pension contributions. Under present law, employer contributions to private pensions and income accruing to pension funds are excluded from the tax base. Likewise, accruals of social security (OASI) benefits and employer contributions to social security are excluded from the tax base. The comprehensive income tax would also exclude accruals of social security benefits from the tax

base, and would allow deduction of employee contributions to social security. Social security benefits are fully taxable when received, the deduction for the employee's contribution having already been made. The comprehensive income tax also excludes employer contributions to private pension plans, but includes the earnings on the accumulated contributions in the tax base.

The cash flow tax excludes the same items as the comprehensive income tax. But earnings on accumulated private pension contributions are also excluded. (In the tables, employee social security contributions are shown on the "Exclusions" line for the comprehensive income tax; they are listed as "Deductible saving" under the cash flow tax.) Under the cash flow tax, five of the six families portrayed in Cases 3 and 4 show tax increases as compared to present law; the $8,000, two-earner family shows a small $23 tax decrease.

In cases 3 and 4, the comprehensive income tax is uniformly higher than the cash flow tax in four of the six examples. In one case, there is no tax liability under either tax. For the $8,000, one-earner case, the comprehensive income tax is lower because of the larger personal exemption. However, comparison of the comprehensive income tax and the present tax does not show a consistent pattern.

For both one- and two-earner families, there is no comprehensive income tax for the $8,000 family -- a tax decrease from present law. Again, this is the result of the higher tax threshold due to the personal exemption level. At the $16,000 level of income, there is a very modest tax increase ($23 or 2 percent) for the one-earner family and a somewhat larger tax reduction ($72 or 10 percent) for the two-earner family. At $32,000 of income, the one-earner family has a $399 (11 percent) tax increase and the two-earner family has a $51 (2 percent) tax reduction. These examples suggest that the comprehensive income tax shifts the tax burden slightly from the two-earner family to the one-earner family. Under both model taxes the deductibility of one-half of child care expenses and the exclusion of one-fourth of the wife's net taxable earnings have approximately the same effect for two-earner families in the middle and lower income families as the present child care credit.

Cases 3 and 4 help to identify these families in the middle income ranges who would have increased tax under the model proposals. Both plans would eliminate the separate corporate income tax, and the resulting reduction in tax on capital income is compensated within each income class by increases in taxes on labor income.

Case 5 (Table 26) is the simplest case. It is similar to case 1 except that the family rents its home and uses the standard deduction. These families are consuming all of their income, and are not covered by social security or any other pension plan. As compared with current law, the comprehensive income tax is higher for the low income family, and lower for the higher income family. The break even point appears to be at about $25,000. At the $8,000 income level, the tax increase would be $150 per family -- over 77 percent; at $16,000, the increase is $327 -- 19 percent; and at $32,000 there is a tax decrease of 5 percent, or $308. The cash flow tax is higher in each case than the comprehensive income tax. It appears that the comprehensive income tax would be higher than the present tax up to income levels of about $40,000 to $45,000. Above that level, the cash flow tax would be lower than present tax, but higher than the comprehensive income tax.

Case 6 (Table 27) portrays a family whose income is all in the form of dividends from corporate stock. Throughout this study, there is full attribution of corporate earnings to the individual, that is a proportionate part of corporate retained earnings is attributed as current income to individual stockholders. The present law corporate tax is similarly added as a tax liability of the individual owner of capital.

Table 26

Case 5

One Earner; Renter; Standard Deductor;
All Cash Only Wage Income; No Saving

	Present Law Tax	Comprehensive Income Tax	Cash Flow Tax
At Total Income of $16,000			
Money wages	$16,000	$16,000	$16,000
Exclusions	---	---	---
Adjusted income	16,000	16,000	16,000
Deductions			
Standard 1/	2,560	---	---
Contributions	---	200	200
Miscellaneous 2/	---	200	200
Total	2,560	400	400
Exemptions	3,000	6,000	4,000
Taxable income	10,440	9,600	11,600
Personal tax	1,917	2,064	2,494
Credits	180 3/	---	---
Net tax	1,737	2,064	2,494
At Total Income of $8,000			
Taxable income	2,900	1,600	3,600
Personal tax	434	344	774
Credits	140 3/	0	0
Net tax	194	344	774
At Total Income of $32,000			
Taxable income	26,200	25,200	27,200
Personal tax	6,452	5,964	6,604
Credits	180 3/	0	0
Net tax	6,272	5,964	6,604

Office of the Secretary of the Treasury
Office of Tax Analysis

November 8, 1976

1/ 0.16 x $16,000.
2/ Union dues.
3/ Personal exemption credit or taxable income credit.

Table 27

Case 6

No Earners; Renter; Standard Deductor;
Income is Dividends and Corporate Retained Earnings;
Only Corporation Saves

	Present Law Tax		Comprehensive Income Tax	Cash Flow Tax
At Total Income of $16,000				
Dividends	$6,800		$8,000	$8,000
Corporate retained earnings	6,800		8,000	8,000
Corporate taxes	2,400		---	---
Total	16,000		16,000	16,000
Exclusions 1/	9,200		---	8,000
Adjusted income	6,800		16,000	8,000
Deductions				
Standard	2,100		---	---
Contributions	---		200	200
Miscellaneous 2/	---		200	200
Total	---		400	400
Exemptions	3,000		6,000	4,000
Taxable income	0		9,600	3,600
Personal tax	0		2,064	774
Corporate tax	2,400		---	---
Gross tax	2,400		2,064	774
Credits	0	3/	---	---
Net tax	2,400		2,064	774
At Total Income of $8,000				
Taxable income	0		1,800	0
Personal tax	0		387	0
Corporate tax	1,200		0	---
Gross tax	1,200		387	0
Credits	0	3/	---	---
Net tax	1,200		387	0
At Total Income of $32,000				
Taxable income	8,424		25,200	11,200
Personal tax	1,473		5,964	2,408
Corporate tax	4,800		---	---
Gross tax	6,273		5,964	2,408
Credits	168	3/	---	---
Net tax	6,105		5,964	2,408

Office of the Secretary of the Treasury
Office of Tax Analysis

November 8, 1976

Footnotes for Case 6

1/ For the Cash Flow Tax, an alternative would be to include corporate retained earnings in adjusted income and to allow an equal deduction for saving.

2/ Asset management expenses.

3/ Personal exemption credit or taxable income credit.

Because corporate income is the sum of dividends, retained earnings, and taxes, the elimination of the corporate tax must affect the remaining components. For this illustration, it has been assumed that profits are divided equally between dividends and retained earnings. In order properly to compare the model taxes, which integrate corporate and personal taxes, against the existing dual tax system, liability under present law is given as the sum of personal and corporate taxes attributed to individuals.

In case 5, the model taxes are lower by 80, 90 or even 100 percent than under present law. Deductions are larger under the cash flow tax than under the comprehensive income tax because the latter taxes retained earnings to the individual whereas they are deductible saving under the cash flow tax.

Case 7 (Table 28) shows a single example for a $32,000 income family that receives about 70 percent of its income from cash wages and the remainder from tax-exempt bonds. In this case adjustment is made for the implicit tax that the family pays by in the form of reduced after-tax yield on tax exempt securities. There is also a share of corporate tax attributed, as before, to income from capital -- in this case, the interest on equivalent taxable bond. The tax bill presented to this family under the cash flow tax is $4,038

Table 28

Case 7

One Earner; Renter; Standard Deductor; Income is Wages and Tax-Exempt Bond Interest; No Saving

	Present Law Tax		Comprehensive Income Tax	Cash Flow Tax
Money Wages	$19,938		$19,938	$19,938
Tax-Exempt Interest	8,000		---	---
Implicit Tax 1/	2,253		---	---
Corporate Tax 2/	1,809		---	---
Equivalent Taxable Interest 2/			12,062	12,062
Total	32,000	3/	32,000	32,000
Exclusions 4/	12,062		---	---
Adjusted Income	19,938		32,000	32,000
Deductions				
Standard	2,800		---	---
Contributions	---		200	200
Miscellaneous 5/	---		200	200
Total	2,800		400	400
Exemptions	3,000		6,000	4,000
Taxable Income	14,138		25,600	27,600
Personal Tax	2,794		6,192	6,832
Implicit Tax 1/	2,253		---	---
Corporate Tax 2/	1,809		---	---
Gross Tax	6,856		6,192	6,832
Credits	180	6/	---	---
Net Tax	6,676		6,192	6,832

Office of the Secretary of the Treasury
Office of Tax Analysis

November 12, 1976

1/ The municipal yield in 1975 was 0.0689, implying that this unit held $116,110 of bonds selling at par. The same holding in corporate Aaa bonds would have yielded $10,253. The difference of $2,253 is the income penalty for holding municipals or the Implicit Tax.

2/ Under present law, the yield on all capital is estimated to be .85 of what it would be in the absence of the Corporation Income Tax. Therefore, the after-tax bond yield of $10,253 would be raised to $12,062. The Corporate Tax penalty is the difference, or $2,253.

3/ This case is shown only for a taxpayer with $32,000 of income because it would be irrational under present law, for a low bracket taxpayer to hold the relatively low yielding tax-exempt bonds.

4/ Tax-exempt bond interest, corporate tax, and gross implicit tax.

5/ Union dues and/or asset management expenses.

6/ Personal exemption credit or taxable income credit.

higher than that given by the present personal income tax alone; but when the effects of the corporation tax and the implicit tax are included, the tax increase is only $156.

The comprehensive income tax would also result in a large increase in personal tax liability because the tax base now includes the income of bonds, which, in turn, have increased yields. But the income of the family after-tax will, in fact, have been reduced by a smaller amount as a result of the tax change. The difference in this case is $484.

4. Summing Up

Certain general observations may be made about the quantitative analysis of the model tax reform plans.

First, from the simulation results, it seems clear that one can broadly duplicate the vertical structure of tax burdens by applying a rate schedule which is much more moderate than the present one to a greatly broadened tax base. The plans described above use marginal rates ranging from 22 to 39 percent in replacing both the present corporate and individual income taxes. While subsequent refinement and updating may lead to changes in these rates, it is apparent that nothing like the existing 14 to 70 percent rate structure is necessary. The results do suggest, though, that some progression in the marginal rates will be required unless a

decision is made to change the vertical structure of tax burdens, lowering burdens at the top of the income distribution and raising them in the bottom and middle, in the interests of the simplification and, perhaps, efficiency advantages which would be achieved by use of a single tax rate.

Second, the simulated vertical structure of tax burdens is rather sensitive to the assumption which is made about who bears tax burdens which are not now allocated by the individual income tax. Much the most important of these is the burden of the corporation income tax. The assumption made for the purpose of the simulations in this chapter, that the corporation income tax is spread evenly over all property income, is not one which can be convincingly supported by empirical evidence, although it is not an unreasonable guess. Thus far only this assumption has been used, in the interest of keeping the analysis within manageable bounds. However it may be desirable to explore the sensitivity of the results to this assumption, for example, by allocating one-half of the corporation income tax to labor earnings or even by allocating more than 100 percent of the tax to property earnings. Both of these are outcomes within the realm of possibility.

Third, it is clear from the discussion above that the effects of the radical changes under discussion are not easy

to measure. This is due in part to the role played in determining these effects by the incidence of the corporation tax as just discussed. It is due as well to statistical problems, since in the simulation a great many elements have had to be guessed at by methods of varying degrees of realiability. Finally, and importantly, the changes involve in several cases a reallocation of tax burdens within the lifetime of the taxpayer, so that over a taxpaying "career" an individual will tend to pass through stages when he is seen as a loser under one of the reform plans and other stages when he is a gainer. Considerable caution must therefore be exercised in interpreting the simulation results.

Fourth, as was certainly to be expected, the effects of the model reform plans will be very different for taxpayers in different present circumstances. The comparisons presented in section 3 above have attempted to look behind the tax data for different units to their underlying endowments of labor and capital. The interpretation of the differences in tax results is sensitive to this method of determining when taxpayers are in comparable circumstances. It is also sensitive to whether one takes into account the shifted taxes (particularly the corporation income tax) and the implicit taxes (for example, the implicit tax on "tax-exempt" interest). A particularly striking example of this

is the case of the family with significant tax-exempt interest. In the example (Table 28) personal tax net of credits is shown to increase from $2,614 under present law to $6,192 under the model comprehensive income tax proposal. When the present law implicit tax and shifted corporate tax are taken into account, the taxpayer in question is shown to enjoy a tax decrease, from $6,676 to $6,192, under the change from present law to the model comprehensive income tax. For an objective analysis of tax burdens under alternative plans, this effort to take into account the burdens of taxes not explicitly allocated to particular taxpayers under the present law seems essential, yet it is not clear that the result will make anybody happy. Those who would like to see the tax burden of the taxpayer with tax-exempt interest increase, for example, will point to the reduction of burdens in Table 28, whereas the taxpayer himself will see his calculated tax increase substantially, naturally looking only at the actual calculated liability assessed to him under the new rules.

Footnotes

1/ Social security disability benefits and medicare benefits receive separate treatment (see Chapter 3).