THE FLAT TAX, NEGATIVE TAX, AND VAT: GAINING PROGRESSIVITY AND REVENUE

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Overview of Current Tax Reform Proposals

The ubiquitous attack on the federal income tax system has accelerated in recent years. Even economists no longer believe that modest alterations in the present system will suffice. Tax reform has come to mean a complete overhaul of a system riddled with holes. The four tax reform proposals that have received the most attention are the Fair tax (H.R. 3271, S. 1421), introduced by Senator Bill Bradley and Congressman Richard Gephardt; the Fair and Simple (FAST) tax (H.R. 6165, S. 2948), introduced by Congressman Jack Kemp and Senator Robert Kasten; Treasury I, the U.S. Treasury's tax simplification proposal; and Treasury II, the White House's modified version of Treasury I.

The present income tax is held in disrepute because it violates five basic principles of taxation:

1. The tax system should be fair, sufficiently fair to encourage compliance. Horizontal fairness, an idea that dates to Plato, requires taxpayers with the same incomes (regardless of sources) to pay roughly the same amount of tax. Vertical fairness would have taxpayers with higher incomes paying more tax than those with lower incomes. Virtually everyone agrees with these notions of fairness except apparently those special interest groups who try to control tax legislation.

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2. The tax system should be simple and understandable to the taxpayer. The personal income tax was sufficiently complex in 1983 that $3 billion was spent on tax preparation. This may explain why H & R Block opposes tax reform.
3. The tax system should have a broad base. Tax reformers, beginning 40 years ago with Henry Simons at the University of Chicago, have argued for a broad tax base. The reason is as simple as tax simplification: the broader the tax base, the lower the tax rates required for a targeted revenue.
4. The tax system should impede as little as possible the long-run allocation of resources: this is the economic efficiency principle. Today, the well-to-do family and the corporation are at least as much concerned with what an investment will do to their taxes as they are with what it will do for production. Today, tax preferences, which generally take the form of tax expenditures, are so pervasive that they exceed the amount of revenue generated by the income tax system.
5. The federal tax system should contribute to economic stability by cushioning swings in consumer and business incomes from the business cycle. Tax revenues that decline more rapidly than incomes during recessions and rise more rapidly during expansions cushion such swings in income.

In the three decades ending in 1979 the tax system adequately funded the federal government. This is so even though the federal revenue-to-spending ratio dropped to about 91 percent during the 1970s. This latter decline is largely attributable to deep recessions during the Nixon and Ford administrations. If one uses forecasts from David Stockman, who until recently headed the Office of Management and Budget (OMB) and was notorious for his overoptimism, the federal revenue-to-spending ratio will remain at only 80 percent from fiscal 1985 onward, even with strong economic growth. Will any of the major tax reform proposals alter this future? Regretably, they will not because they are all designed to be revenue neutral, and (without tinkering) would not generate any more revenue in 1985 than the present system.

Despite its other faults the present income tax has considerable vertical equity; it is progressive in structure since the average tax burden rises with income. Those with the highest incomes receive the greatest benefits from a stable, democratic government and from the free enterprise system. It is poetic justice that those who benefit the most in terms of the government's nurture and preservation of wealth should pay the highest tax rates. There are those who contend that all taxation is a burden. Let there be no mistake about it; it is, but such antagonists (or anarchists) miss the point. Unless the federal government enforces contracts and deters crime against property, develops and maintains a national system of communications and transportation, guarantees a nationwide system of education that provides a skilled labor force for industry, stabilizes the economy, regulates trade, and protects factories from foreign enemies, individuals and businesses will not be able to utilize fully their capacities for earning incomes. Taxation is a burden that individuals agree to share in order to maintain the necessary infrastructure for corporate enterprise and a free society. No political theorist ever said that government enterprise was a free lunch or that it should be. A plane cargo without an airport, a truckload of personal computers halted by a collapsed bridge, a factory bombed by the enemy, or an information industry dependent upon illiterates are all useless.

With respect to fairness, all of the aforementioned reform proposals are generally less progressive in nominal terms than the present system. In particular, the FAST tax, the flattest of them all, would shift some of the relative tax burden to middle-class taxpayers because low- and high-income taxpayers would receive a larger relative tax reduction.

Irrespective of the relative importance of tax simplification, its limits are set by the necessity to tax net rather than gross income. All of the major tax reform proposals would simplify and broaden the tax base by eliminating many tax preferences. However, exclusions such as the personal exemption that are available to most taxpayers and serve important goals are retained. As a general principle, the tax code can only be "as simple as possible," given potential conflicts with other important goals of the tax code.

An Alternative Proposal: FLANVAT

This proposal—for a flat, negative, and VAT tax system (FLANVAT)—is a combination of a modified flat-rate system of federal income tax reform for individuals with an income-based refundable tax credit (FLAN) and a value-added tax (VAT).[1] The FLAN reform program replaces the multi-bracketed tax-rate structure for individuals with three tax rates, which range from 10 to 30 percent, and applies these rates against a substantially broadened tax base. This part of the program is structured so that it would not significantly

[1]The overall configuration of this proposal first was presented in Canterbery (1983). Additional detail was provided in Canterbery (1984). The present paper elaborates the specific characteristics of the proposal and provides a quantitative analysis of its impact.

change total tax liabilities, total federal expenditures, the distribution of tax liabilities, or federal expenditures among income classes (though such could be done).

The tax base under the reform program would be expanded by repealing most exemptions, deductions, and credits as well as a number of additional tax expenditures. These alterations would expand the tax base for all income classes. An income-based refundable credit would assist the same lower-income groups even as it provided about the same dollar amount of assistance as the federal income-security programs that it replaced. The refundable income tax credit would guarantee a proportion of poverty level income, which is based on a necessities budget and demographics. This credit would be phased out as an individual's income increased, although the credit phase-out would be limited by a low-level credit floor. Finally, a comprehensive value-added tax (VAT) is suggested as a means for raising net revenue and therefore as a sorely needed deficit-fighter. The regressive feature of a flat VAT would be offset by the indexation of personal exemptions and by the refundable income tax credit.

Income Taxation and Welfare: The FLAN Program

Tax Code Simplification

The first step in reform is to broaden the tax base and to simplify the income-tax system even while increasing its fairness to assure compliance. Most current deductions from adjusted gross income for individual exemptions would be repealed. Although the parental personal exemption for students age 19 or over and the exemptions for the taxpayer and spouse, dependents, aged, and blind are repealed under the proposed FLAN program, these exemptions would be converted into a credit (see below). The program also would repeal most existing credits, such as the residential energy credits, targeted jobs credits, and the investment tax credit. The foreign tax credit would be retained.

Eight present deductions would be repealed and others modified; among those eliminated would be charitable contributions, moving expenses, and contributions to Individual Retirement Accounts (IRAs) and Keogh plans. The deduction for medical expenses would be altered such that the allowable deduction would be in the amount of 10 percent of adjusted gross income rather than the 5 percent under present law. The itemized deductions that would be retained are deductions for business expenses. In addition, the statutory adjustments to income that would be retained are deductions for employee business expenses and alimony paid.

The tax base would be further broadened and the tax system further simplified by the elimination of 28 tax preferences that also would increase fairness. Gone would be such tax expenditures as the expensing of research and development expenditures and the exploration and development costs for oil, gas, and other fuels. Moreover, compensation would be taxed irrespective of source or name so that workmen's compensation benefits, unemployment insurance benefits, railroad retirement benefits, social security benefits, and contributions to employer-provided insurance and profit-sharing plans would be treated as income.

Changes in Social Security

Two significant changes would be made to social security that relate to benefits and the federal income tax treatment of those benefits: (1) The social security earnings test would be repealed. (2) Some 80 percent of social security benefits would be included in total income for federal income tax purposes.

As a result of the repeal of the exclusions for a number of employer-provided fringe benefits, the social security tax base also would be expanded such that compensation would include these items for purposes of social security taxation. Although these modifications would place social security on a more solid funding basis, the proposed negative income tax would reduce the public's reliance on social security benefits.

Necessities and the Personal Exemption (Tax Credit)

The second step makes the elements of the first palatable. Every family, rich or poor, buys necessities. Exemptions for dependents under the income tax code originally were meant to cover the above contingency, namely, to provide a tax credit equal to the amount spent simply to maintain life. Ultimately there should be only one individual exemption. The household income tax exemption for dependents would be raised to a value equal, or close to, the cost of a marketbasket of necessities for those who are poor. The value of this sole exemption, a refundable tax credit, would vary only with the cost of the marketbasket and the demographics of the household. The government annually calibrates the value of a minimal household budget by defining poverty level incomes based on the current cost-of-living and on demographic characteristics. This official poverty level would be the basis for the refundable tax credit to cover necessities.[2]

[2]In the initial proposal (Canterbery 1983), the use of the BLS "lower" consumption budget or share of it, say 80 percent, for the relevant geographic region and family size was suggested.

Four features are aimed at providing for basic necessities: (1) a defined minimum for which a zero tax-rate applies; (2) a 10 percent tax rate on all taxable income to $20,000 (single filing status) and $35,000 (joint filing status); (3) a refundable tax credit for the poor; and (4) indexation of the refundable tax credit as well as the official definition of poverty to the annual inflation rate. (The official definition of poverty income presently varies with the inflation rate.) This means that the refundable tax credit also is indexed to inflation. The zero bracket amounts would be $1,500 for taxpayers using joint filing status, $1,000 for taxpayers using either a single or a head of household filing status, and $750 for those married and filing separately.

Marginal Tax Rates: A Tri-flat Tax

The third step introduces a modified flat tax system; three statutory tax rates of 10, 25, and 30 percent would be applied to taxable income. Since most deductions and tax preferences would be eliminated, the tax rates would apply to virtually all income above the zero tax bracket. The three marginal tax rates and the complete tax schedule appear in Table 1. The maximum marginal tax rate of 30 percent would be attractive to almost everyone. In addition to modifying the rate structure, the FLAN program would abolish indexation of the tax brackets. However, the indexation of the refundable tax credit under FLAN would moderate, but not eliminate, the present-law automatic stabilization. Since this proposal attempts to insure that families can provide for absolute necessities, the indexation of the refundable tax credit is far more important than the indexation of the three tax brackets. Moreover, the automatic countercyclical effects of the federal tax system would be retained, though probably dampened during expansions.

The Negative Income Tax: An Income-based Refundable Credit

There is still a social problem with the unemployed and present unemployables who have incomes below a minimal consumption budget. Conservatives bemoan the "disincentives" of the hodgepodge of welfare services: liberals complain about the infringements upon freedom and dignity from the various "needs tests." The negative income tax, endorsed by liberals such as James Tobin and conservatives such as Milton Friedman, is an ingenious system for transferring income to the poor, and providing a minimum guaranteed income. This income should be sufficient to maintain the social minimum for necessities. A negative income tax could reduce the present burdens placed on the social security system and the payroll tax connected with future benefits.

TABLE 1

PROPOSED TAX BRACKETS AND TAX RATES, 1985

Tax Bracket	Rate Structure
	Single Filing Status
$0 to $1,000	no tax
$1,000 to $20,000	$0 plus 10% of excess over $1,000
$20,000 to $65,000	$1,900 plus 25% of excess over $20,000
Over $65,000	$13,500 plus 30% of excess over $65,000
	Joint Filing Status
$0 to $1,500	no tax
$1,500 to $35,000	$0 plus 10% of excess over $1,500
$35,000 to $100,000	$3,350 plus 25% of excess over $35,000
Over $100,000	$19,600 plus 30% of excess over $100,000
	Married Filing Separately
$0 to $750	no tax
$750 to $17,500	$0 plus 10% of excess over $750
$17,500 to $50,000	$1,675 plus 25% of excess over $17,500
Over $50,000	$9,800 plus 30% of excess over $50,000
	Head of Household
$0 to $1,000	no tax
$1,000 to $30,000	$0 plus 10% of excess over $1,000
$30,000 to $75,000	$2,900 plus 25% of excess over $30,000
Over $75,000	$14,150 plus 30% of excess over $75,000

NOTE: Indexation of the personal refundable tax credit would be introduced under the FLAN program and would begin in 1986. Present-law indexation of the tax brackets would be repealed.

Our society is committed to the provision of absolute necessities for every person in need. However, the welfare programs are comprised of a strange assortment of "incomes in kind." The government can best reduce its direct bureaucratic involvement in such programs by moving toward a cash payment system as quickly as possible. Even before the full implementation of a negative income tax, administered solely by the Internal Revenue Service, the government could convert the food stamp program into a cash program. Then the household would have the freedom to allocate such resources to best meet its immediate needs, and the government could get out of the welfare business. Most federal income-security programs—under the broad categories of unemployment compensation, housing assistance, food and nutrition assistance, supplemental security income, AFDC, and low-income energy assistance—can be eliminated under the tax reform program. The president's "Budget of the United States Government, 1985," estimates that the federal expenditures for these programs will be approximately $64 billion in fiscal 1985. Though it may be prudent to phase out gradually such programs, the need for such programs fades from the social landscape once a negative income tax is a reality. None of the other tax reform proposals provide for this social welfare reform on the expenditures side.

Under FLAN, a negative income tax, comprised of a refundable credit administered on a monthly basis by the Internal Revenue Service, would replace the present federal welfare system. The negative income tax would guarantee at least 50 percent of poverty level income to an individual electing to use the single filing status, and guarantee generally over 75 percent of poverty level income to those filing jointly. For the head of household filing status, over 60 percent of poverty level income generally would be guaranteed. To the extent income assistance is an incentive, the poor would be motivated to stay within the family unit.

The initial credit amounts that replace the current personal exemptions would be based upon both the filing status and the number of dependents. The definitions of the taxpayer, spouse, and dependents would be similar to the present tax code, although no additional credit amounts would be provided to the aged or the blind. The initial credit amount for the single person and the head of a household would be $2,800. For the joint filing status, the initial credit amount would be $5,400. To these amounts, $1,500 would be added for each dependent, up to a maximum of $6,000. The estimates provided in Table 2 and just summarized reflect averages for the population as a whole. In practice, since poverty levels vary with demographic char-

TABLE 2

ESTIMATED POVERTY LEVELS AND GUARANTEED MINIMUM INCOME LEVELS, 1985

	Family Size					
	1	2	3	4	5	6
Poverty Level (PL)	5,546	7,107	8,702	11,157	13,208	14,941
Joint Filing Status		5,400	6,900	8,400	9,900	11,400
(% PL)	NA	(76)	(79)	(75)	(75)	(76)
Single or Head of Household	2,800	4,300	5,800	7,300	8,800	10,300
(% PL)	(50)	(61)	(67)	(65)	(67)	(69)

acteristics, these credit amounts would be adjusted so that the same proportions of poverty-level income would be guaranteed for the different filing statuses in various geographical areas. Credit amounts would not be adjusted to reflect different ages or a variety of family structures.

The effective marginal tax rates under present welfare programs are very high. A family of four with only $8,000 in wage income, for example, would qualify for various programs under present law. This family would be qualified to receive food stamps and the earned income credit among other benefits. The effective marginal tax rate for this family would be the food stamp phase-out rate of 30 percent plus the earned income credit phase-out rate of 12.5 percent plus the federal income tax rate of 11 percent, which yields a total effective marginal tax rate of 53.5 percent.

If this family elected to receive other federal benefits such as housing assistance, supplemental security income, or low-income energy assistance, the phase-out rates for each program would be added to this 53.5 percent. Since the phase-out rates for the housing assistance programs are generally 30 percent, for supplemental security income, 50 percent, for AFDC, 100 percent, an effective marginal tax rate in excess of 100 percent is easily attainable for those receiving benefits under several programs. The eligibility requirements of the programs vary with the state and specific circumstances.

In 1981, 58.5 percent of the 11.7 million households below the poverty line received either medicaid, public housing, food stamps, or school lunch benefits, and 37.8 percent of these households received benefits from more than one of these programs. When these income-based programs are combined with the present federal tax system very high marginal federal tax rates can result—rates far in excess of the marginal tax rates of the upper middle income or even rich taxpayers. On top of this, the earnings test applied to present social security benefits reduces social security benefits by 50 cents for every dollar earned in excess of a certain threshold, which results in a 50 percent marginal tax rate. Finally, the present-law taxation of social security benefits counts income twice over certain income ranges; in such cases a $100 increase in income adds $150 to adjusted gross income, effectively increasing the marginal tax rate by 50 percent.

The marginal tax rates under the proposed negative income tax are lower. The refundable credit would be phased out at a 35 percent rate as adjusted gross income exceeded zero, but would be limited by a credit floor. Thus, if an individual's adjusted gross income increased by $1,000, the credit would be reduced by $350. The credit floor would be equal to $100 for a taxpayer and $100 for a spouse plus $100 times the number of dependents. Therefore, for a family of four filing a joint return, the credit floor would be $400.

The social security earnings test would be repealed, eliminating the implicit 50 percent marginal tax rate. Also, the present-law tax treatment of social security benefits would be repealed.[3] The proposed refundable credit, meanwhile, would be lowered by 64 percent of any social security benefits received. Consequently, for those social security recipients with incomes that place them in the phase-out range of the negative income tax, an increase in social security benefits of $1,000 would result in a combined increase in federal income tax liability and a credit reduction equal to $1,000. Thus, over certain ranges of income, social security benefit increases would be offset by equal refundable tax credit reductions.[4]

Effective Marginal Tax Rates: Low-Income Taxpayers

The combination of the highest statutory income tax rate with the income-based negative income tax alters the effective marginal tax rates. For the low-income taxpayer, the first positive income tax rate of 10 percent would be added to the negative income tax phase-out rate of 35 percent. An individual whose adjusted gross income places him in the phase-out range of the negative income tax would receive an effective 45 percent marginal tax rate, the highest attainable.[5] Of course, if an individual's income places him outside the phase-out range of the negative income tax, the effective marginal tax rate is the same as the statutory marginal tax rate. This 45 percent effective marginal tax rate may seem high, but it generally represents a significant reduction compared to the present tax system.

Revenue and Distributional Effects: A Simulation

A simulation model[6] allows a comparison of the existing distribution of federal income tax liabilities by income class with the post-reform distribution. The revenue shortfalls suggested by Table 3 and

[3]The double counting of income over certain income ranges would be repealed as well.

[4]The cost of administration of this program likely would be no more and possibly substantially less than the costs of administration of the current income-security programs because duplication of services would be lessened. The administrative costs currently are approximately 11 percent of the budgets of these programs according to Congressional Research Service estimates.

[5]The tax brackets are structured so that the credit floor is attained prior to the entrance into the next bracket and its associated higher tax rate.

[6]The estimation of the revenue and distributional effects of the FLAN program is based largely on simulations using the Individual Income Tax Model of the Joint Committee on Taxation. This model compares tax liability under present law to the reform proposal

Table 4 are not indicative of the complete proposal's impact in either 1981 or 1985. For one thing, data used in the simulation model do not contain information on the repealed provisions proposed as base-broadening measures. These "off-model" items, if repealed, are estimated to increase individual federal income tax liabilities by $5.6 billion in calendar year 1985 compared with present law. (Table 3 and Table 4 do not include these off-model items. Moreover, these tables do not address expenditure changes under the program.)

Since social security taxes also would be increased by the reform proposal, the estimated distribution of the combined tax liabilities is presented in Table 4. This distribution includes the estimated federal income tax liabilities from Table 3 plus estimated social security contributions of employees and the self-employed based upon 1985 law, excluding employers' contributions.

TABLE 3

SIMULATION OF FEDERAL INCOME TAX LIABILITIES UNDER TAX REFORM

Expanded Income ($ thousands)	Present Law	FLAN Reform Program	Change	Percentage Change
0 to 10	3,848	−66,383	−69,932	−1817.3
10 to 20	29,027	17,041	−11,987	−41.3
20 to 30	43,496	39,880	−3,616	−8.3
30 to 40	38,428	35,701	−2,727	−7.1
40 to 50	25,225	25,790	564	2.2
50 to 75	26,152	27,536	1,384	5.3
75 to 100	12,076	12,298	222	1.8
100 to 200	18,978	18,545	−433	−2.3
200 +	17,558	17,401	−157	−.9
Total	214,489	127,809	−86,680	−40.4

NOTE: Estimates are subject to rounding errors and are in millions of dollars. These figures include most of the changes made under the Deficit Reduction Act of 1984 with the most significant exceptions being changes made to income averaging and the holding period for long-term capital gains and losses.

using a sample of 86,052 actual returns weighted to represent the characteristics of the total population. The simulations use 1981 levels of income and expenditures to compare the reform program to 1985 law. Thus, this analysis is "static" in the sense that no change in individuals' behavior is provided for as a result of the change in law. Although this assumption may not be realistic in some instances, it does provide a consistent basis for comparing different proposals.

TABLE 4

SIMULATION OF FEDERAL INCOME TAX AND SOCIAL SECURITY TAX LIABILITIES UNDER TAX REFORM

Expanded Income ($ thousands)	Present Law	FLAN Reform Program	Change	Percentage Change
0 to 10	13,722	−54,302	−68,024	−495.7
10 to 20	50,510	40,048	−10,462	−20.7
20 to 30	69,504	67,301	−2,203	−3.2
30 to 40	58,353	56,512	−1,840	−3.2
40 to 50	35,436	36,271	834	2.4
50 to 75	33,962	35,452	1,489	4.4
75 to 100	14,297	14,536	239	1.7
100 to 200	20,842	20,421	−421	−2.0
200 +	18,022	17,868	−155	−.9
Total	314,649	234,106	−80,543	−25.6

NOTE: See note to Table 3.

The FLAN program is distributionally neutral[7] for the income classes above $20,000. For the income classes below $20,000, the net effect of the program would be such that their treatment would be essentially the same as under present law. Of course, the negative income tax requires federal expenditures in the form of refundable income credits, an outlay estimated to be $63.1 billion in calendar year 1985. The estimated change in federal expenditures from all the previously described changes would be $6 billion in calendar year 1985. The estimated impact on tax liabilities of the reform program for calendar year 1985, *excluding the outlay portion of the negative income tax,* is that it would increase federal income and social security tax liabilities by $7.7 billion as compared to present law. Thus, this income tax reform program also is revenue neutral (within 5 percent of the estimate of the tax liability under present law).

A Value-Added Tax Base for Revenue Enhancement

Still, the income tax alone is not the ideal form of taxation. An effectively progressive income tax (essential for equity) cannot be neutral in its impact on the long-run allocation of resources. A tri-flat progressive tax on discretionary income, in the absence of other revenue sources, would tax personal saving at a high marginal rate.

[7]A program generally is considered to be distributionally neutral if it does not change the distribution of tax liabilities by income class by more than 5 percent.

However, a part of this impact is mitigated by other sources of investment funds. Total federal taxes paid by corporations has steadily declined from 32.1 percent of total federal government receipts in 1952 to 6.2 percent in 1983. A large share of gross business investment is financed from retained corporate earnings. These earnings come from consumer expenditures that would be bolstered by spending from tax-exempt income and the negative income tax. Nevertheless, in the interest of neutrality and the avoidance of double taxation of corporate profits, ideally a final step ought to be taken, namely, to reduce corporate profits taxes to zero. This move, however, cannot be made in a single step because of present revenue requirements and because of the tax avoidance that incorporation would provide.

The impending death of corporate income taxation and the residual problems with even a reformed personal income tax system brings us to a needed and attractive additional tax base. For a quarter of a century public interest in a value-added tax has waxed and waned in the United States but never quite disappeared. During 1979 and 1980 Senator Russell Long and Representative Al Ullman, chairmen of the two congressional tax-writing committees, courageously supported such a tax. One cannot avoid speculating how much different economic history might have been if Ullman's H. R. 5665, the Tax Restructuring Act of 1979, had been considered and passed. Possibly, VAT failed to gain widespread support because it was not considered within the context of a larger debate on tax structure and equity; FLAN eliminates this objection.

Administrative efficiency and reasonable collection costs require that all consumption should be taxed at a single, flat rate—a flat VAT. For equity, this means that VAT should not be implemented without the recommended reductions in the income taxes paid on the personal income allocated to necessities. The VAT paid in the price of necessities simply would increase the value of the income tax credit for necessities for all taxpayers and the negative income tax for lower-income filers, much as would inflation. In this way VAT would be both administratively efficient and equitable; otherwise, a VAT on necessities such as food and medicine would be regressive.

A value-added tax would raise the price level by at least the percentage of the tax and thus should be implemented in stages. Such increases could be coordinated with the proposed changes in the income tax structure. For example, careful study might conclude that a 2 percent VAT would be appropriate in the first year of the new tax. In theory, the tax base for VAT is the value added to the product at each level of production. In practice, the tax base is measured by the increase in sales price at each stage of production. Each stage in the chain collects the VAT on its sales, takes a credit for VAT paid on purchases to other firms, and remits the net amount to the IRS. At the end of the chain, the consumer pays the full amount of the tax in the sales price of the good or service and *with no other reform measure* would bear the full burden.

The consumption-type VAT nonetheless is recommended because it is neutral with regard to prices of consumption goods as long as the base is comprehensive and there is a single rate. The consumption variant also provides the most neutral treatment of capital assets and is the easiest to administer, in part because arbitrary depreciation allowances need not be calibrated. Since value added is the value that a business firm adds in the course of its operations to the goods and services it purchases from other firms, such value is added by handling or processing these purchases with the firm's labor force, machinery, buildings and capital goods. The initial acquisition of capital goods is treated the same way as the purchase of supplies so that the consumption-type VAT is equivalent to instantaneous depreciation of new plant and equipment. Since the firm may deduct, in the year of the purchase, the full value of the capital good, the value-added by the capital equipment is not subject to taxation until later years, as the equipment is consumed in the process of production. Thus, taxation on the "value" of capital also happens only once.

Consider the following example for the tax base under the consumption variant of VAT. During the taxable year the firm's gross receipts are $125,000. During the accounting period the firm purchases $25,000 of materials and supplies from other firms and $10,000 of machines (capital goods). The tax base would be $90,000: The purchases on both current account ($25,000 for materials and supplies) and capital account ($10,000 for the machines) are subtracted from the gross receipts from final sales.

Exemption's from the VAT base should be rare. Most experts, however, would agree to the following exemptions. Exports should be exempt in order to avoid taxing our foreign neighbors (whose own VAT is refunded on our purchases). The rental value of owner-occupied homes should also be exempt because of the administrative nightmare of calculating imputed (unobserved) values. Federal government purchases also should be excluded because the government would pay the tax (as a part of prices) and derive no net revenue from it.

Under these provisions the VAT tax base would equal approximately 60 percent of Gross National Product. If 1985 GNP turns out to be $3885 billion (latest DRI forecast), the tax base would be about $2331 billion, and one percentage point of VAT would yield an additional tax revenue of $23 billion. A first-stage tax of 2 percent would yield about $46 billion.

Summary and Conclusion

The proposed income tax program (FLAN) would reform the present federal income tax system by replacing the progressive tax-rate structure with a tri-flat tax system applied to a tax base significantly expanded as a result of the repeal of a number of tax expenditures. A negative income tax, which takes the form of a refundable income tax credit, guarantees a proportion of poverty-level income. This credit would be based on demographic characteristics and would be phased out as an individual's income increased. The phase-out would be limited only by a low credit floor. Most federal income-security programs would be eliminated, but the reduction in federal expenditures would be almost equally offset by the refundable income tax credit, while assisting the same lower-income groups.

Revenue simulations suggest that the FLAN program would be revenue neutral and distributionally neutral for income classes above $20,000 for calendar year 1985. The $6 billion increase in federal expenditures, which results from both the repeal of the social security earnings test and the replacement of the income-security programs with a negative income tax, would assist mostly the income classes below $20,000, without the attendent administrative and social attitudinal problems associated with the current welfare system. The value-added tax that completes the FLANVAT program would add needed revenue for education and other programs aimed at human capital improvements. This ultimately should reduce the number of poor and thereby reduce the negative income tax credits. Eventually, VAT would replace the corporate income tax.

Economists seem to like the idea of a "use" tax. Of course, it is impossible to tie every tax to a specific use. Nonetheless, a combination of VAT and a diminished dependence on the income tax means that ultimately the personal income tax could be used solely for financing national defense. The main contribution of the working class to defense and war efforts has been to supply manpower and tax revenue. A shared social burden could be achieved by financing defense with the corporate tax (until phased-out) and the tri-flat but progressive tax rate. On the other hand VAT is less visible, less felt. Those presently in tax shelters apparently "feel" that too much of their taxes go to social programs. With the allocation of VAT revenue to the income grants for the poor, education, and other social programs, the currently sheltered could be painlessly altruistic.

Moreover, they can see each VAT increase swell their refundable income tax credit. At last, taxation would become less painful.

We need comprehensive tax reform. A piecemeal approach is destined to fail. Because of the magnitude of the new revenue required to end the deficit problem, the required tax change will have tremendous changes in allocations of resources and the degree of equity among households. Those changes are unacceptable. Every part of the elephant must be examined; otherwise, many persons and businesses will be crushed by its misstep.

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THE FLANVAT AS TAX REFORM

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The paper by Canterbery, Cook, and Schmitt (1985) is apparently a report on a much larger study. Like many papers with this parentage, as a stand-alone piece its reach exceeds its grasp. But lack of space is not the only reason for dissatisfaction with the authors' case for a combined flat, negative, and value-added tax (FLANVAT).

Replacing the corporate income tax with a value-added tax is a good idea. Replacing much of the current welfare system with a refundable income tax credit, the "negative income tax," sounds a lot better than it has worked. And FLANVAT's lead-off feature, broadening the base of the income tax and taxing it at three (nonzero) rates, is a conservative and not very desirable reform.

Before discussing FLANVAT, the authors' attempt to defend the existence of taxes should be addressed. I am glad they think taxes need defending. It implies that truly radical proposals are making headway. But their claim that strong bridges and education require a federal, tax-supported government deserves very short shrift. Indeed, we might "agree to share" the cost of government as we might agree to share our wallets with an armed bandit. Their discussion is important, but only as evidence of *their* attitudes about government and ethics which feature importantly in some of their arguments.

The paper's novelty is in explicitly combining its three programs. The comprehensive income tax is an old idea, and both the negative income tax and the replacement of the corporate income tax with a value-added tax (VAT) were discussed seriously in the 1960s.

The authors state that "we need comprehensive tax reform." Because we already have a semicomprehensive income tax, there is a difference between comprehensive tax reform and the adoption of a comprehensive income tax. But the authors opt for the latter by making

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a base-broadened income tax the linchpin of their proposal. This is the conservative approach shared by most other reform proposals, including the four cited in the paper. Why the authors center their plan on it is an intriguing question.

The answer: the authors like its equity properties. (Any possible role a tax might serve as an "automatic stabilizer" usually occupies a subsidiary position among the standards of a good tax nowadays.) They launch an *ad hominem* attack on dissenters from the common notions of horizontal and vertical equity by lumping them with "special interest groups who try to control tax legislation." They also avoid any mention of serious disagreement—even among those who favor progressivity—over how progressive the tax system should be, referring to the "present income tax" as having "considerable vertical equity," and to an "effectively progressive income tax" as "essential for equity."

Even the best of the comprehensive income taxes trades away considerable economic efficiency and growth for somebody's idea of "equity" by imposing multiple layers of taxation on saving. The authors properly seek to ameliorate this with their plan to replace the corporate income tax with a value-added tax. As their taxing of IRAs suggests, though, either their beliefs about equity or their fascination with base-broadening prevents them from extending the same protection to other forms of saving.

Especially to those untrained in economics, base-broadening sounds like a good idea. It is equated to "closing loopholes," "eliminating tax preferences," "reducing tax expenditures," and so forth. We should not forget, however, that a tax base should be defined according to some well-developed and carefully analyzed theory. A tax properly called a comprehensive income tax, for example, should tax all income. Yet many economists familiar with the concept's controversies hardly would feel comfortable laying down precise guidelines about what constitutes "income" in a complex economy. Partly because of these controversies about income, a system of taxation that taxes each instance of income once and only once is bound to include provisions which look, to the layman and probably even to other economists, as if some parts of income are being taxed more than once and others not at all. In other words, loopholes are not obvious and economists should not adopt the loose language of populist reformers. As a stricter definition of a tax loophole, we might try the following: A loophole is a provision of the tax code that results in a particular activity being taxed less than it would be if the theory on which the tax is based were properly applied. If this definition works for "loophole," it also works for "tax preference."

The authors inform us that "*tax preferences . . . are so pervasive* that they exceed the amount of revenue generated by the income tax system," and rely on the elimination of "tax preferences" or "tax expenditures" throughout their paper. Yet we are simply to take for granted that what they identify as "preferences," such as research and development costs, are indeed special favors not supported by tax theory. Frankly, I spend a lot of my time trying to show that many of what the demagogic tax-reformers call "preferences" are *efficient* and fair provisions that ameliorate multiple taxation. So I can not—and I urge others not to—take at face value the authors' assertion that eliminating "28 tax preferences . . . would increase fairness." Lacking the desire, space, and ability to defend all these preferences, I can understand why the authors failed to name, much less explain, them. But they should have acknowledged that theorizing must support the labeling of a provision as a "preference." Carried away with enthusiasm for base-broadening, they almost seem not to recognize this problem.

Even if we agree to call certain provisions "preferences," evaluating their monetary value through the "tax expenditure" approach is especially questionable. Revenue expected from the elimination of each "preference" is estimated individually, and these are summed. Ignoring the effect of the elimination of one "preference" on the revenue to be expected from eliminating another is a major flaw in these calculations. And this flaw is large enough that we should reject *sums of "tax expenditures,"* even if we accept the static numbers associated with individual tax provisions.

Some other aspects of the authors' proposed individual income tax also deserve mention. For example, why simplicity is served by replacing the current fifteen-rate system with three rates when taxpayers use tax tables anyway is beyond me. Ninety-nine rates would not be any more complex. FLANVAT also would eliminate the indexing of tax brackets, *promoting inflation as a deliberate policy* of government revenue raising and violating the commonly recognized goal that an income tax should tax only real income. Comparison of FLANVAT's marginal tax rates with current law and other reform proposals is arduous because of different definitions of taxable income. Nevertheless, we can note that the base is broader than under current law and its 10 percent rate kicks in at just $1,000 for a single return. (Current-law 1986 rates impose no tax up to $2,480.)

Associated with FLANVAT's reformed income tax is its proposal to employ a refundable tax credit as an efficient replacement for many welfare programs. Like today's earned income tax credit (and unlike the blind/elderly credit), those with sufficiently low incomes could receive a check for the net credit left after zeroing out their taxes. Students of intermediate microeconomics can show how a cash grant would probably make the recipient better off (and can not make him worse off) than, say, food stamps of equal monetary value. There may be some philosophical appeal, furthermore, to allowing recipients the freedom to choose their own expenditures.

Under FLANVAT the IRS would have to administer a monthly refundable credit. The authors, however, do not describe its administration and I frankly do not see how the IRS could do an effective job. (Is this the same IRS that handled our Philadelphia refund checks?) It is an understatement that the IRS might have problems handling monthly estimated tax returns. The authors are correct that, even though their credit's 35 percent phase-out rate combines with the 10 percent tax bracket to produce a 45 percent marginal tax rate, this would be considerably below that faced by many current recipients of government assistance. But as with any negative income tax (NIT) which tries to assure a reasonable income level while also keeping its phase-out rate low to avoid disincentives to work, FLANVAT reaches into the middle class. Under the NIT component of FLANVAT, the credit (ignoring the floor) of a joint return filed by a family of four would not be completely phased out until income reached $24,000.[1]

Adding to the plan's complexity is the indexing of these tax credits to the cost of living in the taxpayer's geographic location. Remember that the NIT would be an integral part of the tax return each of us—not just recipients of aid—files. We would have something like a refundable personal exemption indexed to where we live. How specifically is location defined? California? Los Angeles? Beverly Hills versus Watts? What if we moved a couple of times during the year? The problem is not intractable, but it is not simple either.

Those who like the sound of the NIT should take a look at the massive 1983 *Final Report of the Seattle-Denver Income Maintenance Experiment* ("SIME/DIME"). Following a closely monitored method, the Seattle and Denver researchers found that a universal NIT, which would replace the existing (1971–77) welfare system, "would lead to significant reductions in virtually every major dimension of labor supply." Furthermore, "marital dissolution rates among whites and blacks were higher and remarriage rates among Chicanos were lower as a result of the experimental NIT treatments." These and many other findings of SIME/DIME deserve careful attention. Readers who think that philosophical and/or economic principles

[1]The family's FLANVAT guaranteed income level of $8,400 is 35 percent of $24,000.

imply otherwise should consider the following: The giver of a gift violates nobody's freedom by attaching strings, and it is his—and only indirectly the recipient's—utility that should be considered. Those to whom the simple philosophy and economics of NIT appeal to should try to find out what effects NIT actually has before making policy recommendations.

The best idea in FLANVAT is the replacement of the corporate income tax with a value-added tax. This tax reform, which was advocated during the 1960s and 1970s, would replace a complex tax that is biased against saving and investment with a more neutral tax that is comparatively simple to implement. Although the authors recognize these advantages, they do not accurately depict the VAT in their discussion.[2]

The VAT is inaccurately characterized as a tax on consumption. The authors do not mean that it is actually paid (that is, remitted to the IRS) by consumers, since they describe what others call the "invoice method" of collection and payment. They explain why they call it a consumption tax, and if they were right the name would fit: "the consumer pays the full amount of the tax in the sales price of the good or service and *with no other reform measure* would bear the full burden."

The authors are mistaken. A value-added tax is borne by those who add the value: individuals as suppliers of the factors of production. It is useful to picture a product's supply curve without taxes and after the imposition of the VAT: the new curve will lie above and to the left of the former curve. Unless the consumers' demand curve is vertical, so that they buy the same quantity at the higher (after-tax) price as before, consumers and producers will share the tax's burden. The producer will sell less and receive a lower price (after paying the tax) than before the imposition of the tax. Because producers sell fewer units, they hire fewer inputs and offer less for them so the tax is passed back to individuals in their roles as factor suppliers.

Two errors follow from the authors' mischaracterization of the value-added tax as a tax on consumption. First, the VAT is not regressive; rather it can be viewed as a proportionate tax on saving and consumption—unlike the income tax, which falls disproportionately on saving—or as a proportionate tax on factor incomes. The wealthy may proportionately save more and enjoy more interest income, but neither savings nor interest income escapes taxation.

The second erroneous inference the authors draw is that "a value-added tax would raise the price level by at least the percentage of

[2]See Ture (1972) for a detailed analysis of the VAT.

the tax . . . ." Replacing the corporate income tax with a VAT would increase output and transactions by reducing distortions in production. The authors never explain why—and I do not think there is an explanation why—the demand for money would fall so much that velocity of circulation would increase by at least the percentage of the VAT plus the percentage change in transactions.

It is hard not to sympathize with a paper that proposes replacing the corporate income tax with a value-added tax, especially when the authors' description of the VAT's neutral treatment of capital assets is so good. However, the authors are mistaken in several of their other observations about the VAT. Moreover, it is a puzzle how the authors, who understand the virtues of the VAT, can combine it with the comprehensive income tax, which is the most conservative tax reform proposal. Finally, the third part of FLANVAT, a negative income tax, seems to promise considerably more than it delivers.

The paper suffers from a preachy tone which imputes ethical deprivation to readers who disagree with the authors' views on government and progressive taxation. As for "painless altruism," I do not think there is such a thing. If the authors mean actions that help both one's self and others, then the best thing tax reform can do is to eliminate the present code's disincentives to investment and saving. FLANVAT's second syllable is a good start.

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