An Information Report

The Value-Added Tax and Alternative Sources of Federal Revenue

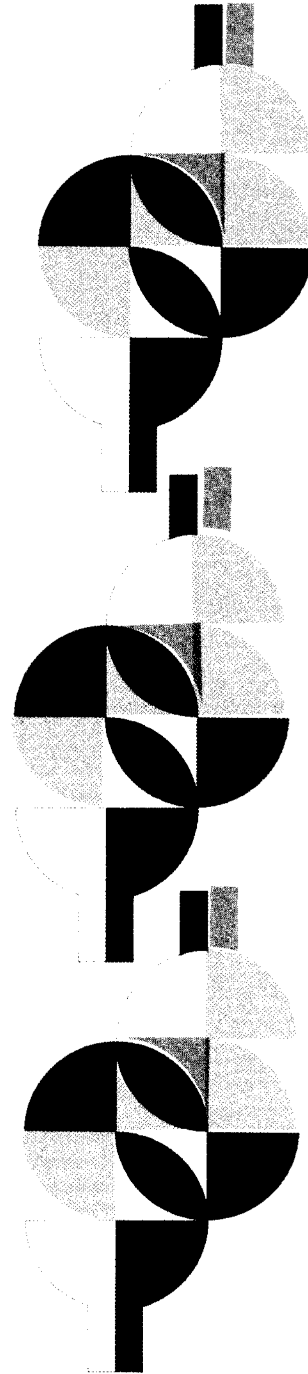
Advisory Commission on Intergovernmental Relations

WASHINGTON, D.C. 20575 • AUGUST 1973

M-78

An Information Report

The Value-Added Tax and Alternative Sources of Federal Revenue



Advisory Commission on Intergovernmental Relations
WASHINGTON, D.C. 20575 • AUGUST 1973

M-78

THE WHITE HOUSE

WASHINGTON

January 20, 1972

Dear Bob:

One of the greatest challenges this Nation faces today is the need to reform our system of financing public education which, as you know, primarily depends on local property taxes. The President's Commission on School Finance, which I appointed in 1970, will be transmitting its recommendations to me in March on the over-all directions in which we should be moving.

Any major shift in current reliance on local school property taxes is likely to have a significant effect on the relationships among the Federal government, the states, and local governments. In our discussion last week with Neil McElroy, I requested the Advisory Commission on Intergovernmental Relations to undertake a study on this subject.

In particular, I would like the Commission to examine:

(1) the impact on intergovernmental relations of a tax reform proposal which would replace residential school property taxes with a Federal value added tax;

(2) whether a Federal value added tax is the best substitute for residential school property taxes;

(3) if a value added tax is to be utilized as a substitute for residential school property taxes (a) what should be the size and nature of the base of expenditures subject to the tax, and (b) what should be the type of income tax credit or other method which is utilized to eliminate otherwise regressive aspects of the tax;

(4) the best method for providing renter relief under a proposal which replaces residential school property taxes; and

(5) the best means of insuring, under a system of school finance in which the states have primary financing responsibility, that local school districts will be able to retain control of basic education decisions, including the provision of local programs of educational enrichment.

The problems are pressing, and I have asked you to complete such a study as soon as possible, and to keep me advised in the interim as to the progress of your study. You will have the complete cooperation and assistance of the Vice President, Secretary Connally and Secretary Richardson, as well as of the Domestic Council.

I very much appreciate the willingness of the Commission to undertake this effort.

Sincerely,

Mr. Robert Merriam, Chairman
Advisory Commission on
Intergovernmental Relations
726 Jackson Place, N.W.
Washington, D.C.

ADVISORY
COMMISSION ON INTERGOVERNMENTAL RELATIONS
WASHINGTON, D.C. 20575

December 27, 1972

Dear Mr. President:

In response to your request of January 20, 1972, the Advisory Commission On Intergovernmental Relations has conducted an exhaustive – but expedited – study of the proposal referred to us by you for a major Federal program of residential property tax relief conditioned on expanded State financing for public education and underpinned by a new or expanded Federal tax such as the value – added tax. The complexities of these issues and their intergovernmental ramifications are obvious.

The Commission is deeply conscious of the serious problems posed both by the current judicial review of the discriminatory aspects of relying on locally-raised property taxes as the primary source of financing public education and by growing public aversion to the rapidly rising property tax levies in many localities to meet the increasing costs of education. We commend you for focusing public attention on these twin problems. In particular, we share your hope that these difficulties can be solved through legislative action rather than by detailed judicial mandating.

Our studies have caused us to conclude that, despite the seriousness of the twin problems indicated above, a massive new Federal program designed specifically to bring about property tax relief is neither necessary nor desirable. However, we again restated our earlier sponsorship of State-supported property tax relief for hard-hit low income property tax-payers, particularly the elderly (the so-called "circuit breaker"), but the majority of the Commission concluded that direct Federal intervention was not necessary.

We support emphatically your suggestion (and our previous recommendation) that the States assume a greater share of public education financing, which if achieved, would greatly facilitate local property tax relief. However, our studies led us to conclude that with very few exceptions the States (particularly with the revenue sharing and beginning of welfare relief granted by the last Congress) have the taxing capability to satisfy the judicial concern so far expressed as to intra-state disparities in educational spending.

Several additional Commission conclusions warrant special attention.

First, while the property tax clearly is unpopular with the general public, the "experts" are by no means united in denouncing it. A strong body of opinion urges substantial efforts to improve assessment procedures and administration. To this end, the Advisory Commission on Intergovernmental Relations has reaffirmed its earlier package of "reform" proposals, and additionally has suggested that the Federal Government take steps to coordinate and strengthen existing Federal programs that have clear potential for stimulating improvement of State and local assessment procedures.

Second, deep concern was evidenced by the Commission over the slow progress in evolving effective means of assessing the worth of educational programs and in evolving more innovative approaches toward such matters as multiple and year–round use of school facilities. We plan to consult with our special advisory group of national school organizations in addressing this question.

Third, while we did not recommend a Federal value–added tax in light of our conclusion that a massive Federal property tax relief program was not warranted, we did reach some conclusions about overall tax policies. It became crystal-clear to us that this country must evolve a mechanism whereby the impact of all taxes – and major new tax proposals – can be assessed. While the Congressional hearings and debate on revenue sharing for the first time importantly focused on the intergovernmental implications of tax legislation, no continuing means to consider the effect of the Federal impact on State and local financing requirements, and vice versa, yet exists. With 32 percent of our gross national product now going into the government sector, we cannot afford the luxury of keeping the taxing and spending programs of the several levels of government in separate pockets. A National Fiscal Policy must be evolved, and a mechanism developed continuously to review and up-date information about all governmental revenue–raising programs. The Advisory Commission on Intergovernmental Relations has determined to develop more detailed recommendations concerning this critical problem.

In conclusion, Mr. President, the Commission would like to reaffirm its belief that our unique federal system of divided governmental responsibilities can – yes, must – be continuously improved. As we approach the 200th anniversary of our country's founding, we applaud your continuing efforts to strengthen this system.

Robert E. Merriam
Chairman

REM/em

PREFACE

This report was undertaken in response to a request from the President for the Advisory Commission on Intergovernmental Relations to determine whether a value-added tax was the best substitute for the residential school property tax.

The request for this study was made by President Nixon in his State of the Union Message on January 20, 1972. The Commission acted on this request at its February 10, 1972, and ordered a study undertaken. It approved this report for publication at its meeting on December 14-15, 1972. In line with the Commission's conclusion that no substantial new Federal aid was needed to secure either general local property tax reduction or intrastate school finance equalization, it follows that a new source of Federal taxation for these purposes was not warranted.

Because there is public concern about the various means for strengthening the Federal tax structure and in view of the fact that the staff had assembled considerable information on this subject, the Commission believed that the issuance of this report would be in order.

This report contains no policy recommendations. It is published as an information document only.

Robert E. Merriam
Chairman

ACKNOWLEDGMENTS

This study was directed and supervised by John Shannon, assistant director, Taxation and Finance. Staff responsibility was assigned to L. Richard Gabler who prepared the report aside from the analysis of estate and gift taxation, which was the responsibility of L. L. Ecker-Racz.

Special thanks are due Henry J. Aaron, John Due, James A. Papke, Kenneth Sanden, Daniel Throup Smith and Norman Ture who kindly provided in-depth comments during the progress of this study. Will S. Myers, Jacob M. Jaffe, John Gambill, Charles Revier and Paul Van de Water, all of the Commission staff, provided considerable assistance and helpful criticism throughout preparation.

The Commission and the staff received extensive assistance from a diverse group of practitioners and academicians. These individuals included: William C. Antoine, Gerald Brannon, Arnold Cantor, Edwin H. Cohen, Charles F. Conlon, John Copeland, C. Lowell Harriss. I. M. Labovitz, Richard W. Lindholm, Allen D. Manvel, Gerald H. Miller, Roy Morey, William H. Oakland, Oliver Oldman, Frank Schiff, Burns Stanley, Robert Statham, Robert F. Steadman and Ronald B. Welch.

Full responsibility for content and accuracy rests, of course, with the Commission staff.

Wm. R. MacDougall
Executive Director

TABLE OF CONTENTS

Page

Chapter I THE VALUE-ADDED TAX: BACKGROUND AND ISSUES 1

Scope of Analysis 2
Findings and Conclusions 2
The Tax Base 3
Preferred Tax Treatment 4
The Income Tax Alternative 4
The Estate and Gift Tax Alternative 4
The Federal Retail Sales Tax Alternative 4
Historical Background of the Value-Added Tax 4
Applicability of VAT Precedents 5
Issues Raised by the Value-Added Tax 6
Broad Base Levy—Large Revenue Potential 6
Strengthening the Federal Revenue System 6
Neutrality 8
Regressivity 9
Intrusion Into State-Local Tax Sources 11
Effect on Savings, Investment and Economic Growth 12
Inflationary Potential 13
Stimulus to Exports 14
Hidden vs. Separate Statement of the Tax 15
Administrative Considerations 16

Chapter II THE VALUE-ADDED TAX BASE: DEFINED, ANALYZED AND ESTIMATED 17

The Concept of Value-Added 18
The Value-Added Tax: A Simplified Example 18
Types of Value-Added Tax 19
Gross Product Value-Added Tax 19
Income-Type Base 20
Consumption-Type Value-Added Tax 20

Types of Value-Added Tax Compared to Other Taxes 21
Choice of the Value-Added Tax Base 22
Methods of Calculating the Value-Added Tax 23
Scope of the Tax 23
The Relation of National Income Accounts to Value-Added Tax Bases . 24
Imputations 26
The Issue of Exemptions 26
Constitutional Restrictions 27
Quantitative Estimates of Value-Added Tax Bases 27
Estimated Tax Yields 29

Chapter III AREAS OF PREFERRED TAX TREATMENT UNDER THE VALUE-ADDED TAX 33

The Question of Preferred Tax Treatment 34
The Regressivity Issue 34
Empirical Evidence and Studies . . 34
The Exemption Approach 36
The Credit-Rebate Approach 38
Credits vs. Exemptions 38
Implementing the Credit 42
Regressivity and the Taxation of Housing 42
Preferred Treatment on Social Grounds 43
Zero-Rate Exemption 43
Preferred Treatment Based on Administrative Considerations 43
Sectoral Approach 44
Small Business Exemption 44
Legislative Precedents 46
Forfeit Procedure 47
Normal Exemption 47
Problems in Determining Value Added 48
Expense Accounts 49
Financial Institutions 49
Actual Experience 49
Alternative Solutions 50
The Government Sector 52
Other Techniques of Preferrential Tax Treatment 53
Differential Rates 53
Reduced Base 54

Chapter IV SOURCES OF ADDITIONAL FEDERAL REVENUES: THE INDIVIDUAL INCOME TAX AND ESTATE AND GIFT TAXES 55

Income Tax Reform 56
Broadening the Tax Base and Effective Rates 57
Added Tax Liabilities by Income Class 57
Upper-Income Class 57
Potential Economic Effects 58
Middle-Income Class 58
Potential Economic Effects 59
Low-Income Class 59
The Brookings Proposal 59
Income Tax Rate Increases 59
Estate and Gift Taxation 62
Taxes on Transfers of Property . . . 63
Revenue Productivity 64
Federal-State Tax Relations 65
Tax Exemptions and Tax Rates . . . 66
Estate and Gift Tax Integration . . . 67
Generation Skipping. 69
Transfer of Property Between Spouses 69
Unrealized Capital Gains 70
Summing Up 71

Chapter V SOURCES OF ADDITIONAL FEDERAL REVENUES: A NATIONAL RETAIL SALES TAX 73

The Retail Sales Tax 74
Taxation of Services 74
Reasons for Taxing Services 74
Actual Practice 75
Taxation of Business Purchases 79
Actual Practice 79

Intergovernmental Fiscal Relationships ... 80
Possible Federal Intrusion ... 80
Tax Coordination ... 84
Administrative Considerations ... 85

LIST OF TABLES AND CHARTS

Chapter I

Table 1. Total Taxation to GNP at Market Prices (Average 1968-1970) ... 7
Table 2. Percentage Distribution of Federal Receipts, by Source, Selected Fiscal Years, 1954-73 ... 8
Table 3. Burden Impact of Raising $25 Billion in Alternative Ways ... 10
Table 4. Current Effective Individual Income Tax Rates and Rate Increases Under Various Methods of Raising Additional Revenue, by Income Classes, 1972 Income Levels ... 11

Chapter II

Chart 1. The Value-Added Tax Illustrated ... 19
Table 5. Gross National Product, National Income and Personal Consumption Expenditures, 1970-72 ... 25
Table 6. Alternative Value-Added Tax Bses, 1971 and 1972 (est.) ... 28

Chapter III

Table 7. Percent Distribution of Family Expenditures, by Income Class, All Urban and Rural Families and Single Consumers, 1960-61 ... 35
Table 8. Burden Impact of Raising $25 Billion in Alternative Ways ... 36
Table 9. Exemption of Food and Medicine in State General Sales Taxes, January 1, 1972 ... 37
Table 10. State Use of a Personal Income Tax Credit-Rebate to Minimize or Offset the Regressivity of Sales and Property Taxes ... 39
Table 11. Proprietorships, Partnerships and Corporations—Number and Business Receipts, by Size of Receipts: 1968 ... 45
Table 12. Proprietorships, Partnerships, and Corporations—Number, Receipts, and Net Profit, by Industry and Size of Business Receipts: 1968 ... 46
Table 13. Treatment of Financial Institutions Under the Value-Added Tax in European Countries ... 50
Table 14. Calculation of Value-Added for Financial Institutions and General Business Under Japanese Value-Added Tax ... 50
Table 15. Gross Product Tax Base, Sullivan Approach ... 51
Table 16. Net Income Type Tax Base, Sullivan Approach ... 52
Table 17. Consumption Type Tax Base, Sullivan Ap-Approach ... 52

Chapter IV

Table 18. Revenue Effect of Various Erosion Features ... 57
Table 19. Revenue Effect of Individual Income Tax Reforms, 1972 ... 60
Table 20. Current Effective Individual Income Tax Rates and Rate Increases Under the $10.2 Billion Brookings Proposal, by Income Class, 1972 Income Levels ... 60
Table 21. Current Effective Individual Income Tax Rates and Rate Increases Under Alternative Methods of Raising Additional Federal Tax Revenues, by Income Class ... 61
Table 22. The Significance of Death and Gift Taxes, Selected Years ... 65

Chapter V

Table 23. Taxation of Services Under State Sales Txes, January 1, 1972 ... 76
Table 24. Comparison of State Shares of Retail Sales and Value-Added ... 82

Chapter I

The Value Added Tax: Background and Issues

Scope of Analysis

This report deals with the value-added tax as a potential new source of Federal government revenue*. It is divided into two parts. The first part analyzes the value-added tax; the second covers alternative sources of additional Federal revenue. Chapter I highlights the historical background of the value-added tax and summarizes the major issues posed by introduction of this potential Federal revenue source. Chapter II examines the value-added tax base and its revenue raising capacity. This discussion defines a "maximum feasible" base for the value-added tax. Chapter III analyzes the question of preferential tax treatment. Chapter IV evaluates the Federal income tax and reform of the existing estate and inheritance taxes as alternatives to the VAT. Chapter V analyzes a Federal retail sales tax.

This value-added tax study is not concerned with the merits of replacing one or more existing taxes—either the corporate income or the local property tax. Nor does it explore the possible uses of value-added tax revenues, or revenues from alternative sources. Rather, the focal point of concern is an evaluation of various tax instruments and their potential for raising substantial additional Federal revenues.

Findings and Conclusions

- The value-added tax has been widely adopted abroad. Two reasons for its acceptance in Europe—to promote a Common Market and to replace cumulative or other sales taxes—have no parallel in the discussion of the value-added tax in this country. In Denmark and Sweden, labor unions initiated or supported rate increases in the value-added tax as preferable to income tax increases.
- The value-added tax can take three forms—gross-product, income-type, or consumption-type. Regardless of the particular form, it is a broad-based tax capable of raising approximately $7 billion to $8 billion per percentage point of rate, assuming no exemptions or deductions. Indeed, the issue of exemptions, which could reduce the tax base to 40 percent or 50 percent of its potential, is more important than the type of value-added tax as far as revenue yield is concerned. The value-added tax is not unique in being a potentially broad-based levy—the same is true for the individual income tax and a National retail sales tax.
- Compared to other nations, the total tax burden is relatively light in the United States—taking 28 percent of gross national product. That places the U.S. sixteenth among the 23 industrialized nations for which such data are available. Some argue that the heavy use of income taxation in this country makes taxing consumption especially desirable. Yet, consumption can be taxed in various ways, only one of which is the consumption form of value-added tax.
- The consumption-type value-added tax is a neutral tax with regard to prices of consumption goods, provided the base is comprehensive and a single rate is applied. To the extent that these conditions are violated, neutrality cannot be claimed.
- The consumption-type value-added tax is regressive—it hits hardest at lower-income individuals. Regressivity can be removed by tax credits which can make the tax either proportional or even progressive, but only as far up the income scale as the credit is made available. Moreover, the tax-credit device could be expensive and could add to difficulties in administering the tax. The progressive character of the Federal tax structure can be maintained without sacrifice of revenue by changes in the individual income tax.
- State officials allege that a Federal value-added tax would compete directly with the ability of States and localities to raise additional revenues from their retail sales taxes. This concern would be especially relevant if the Federal value-added tax is quoted separately at the retail level. Opportunities for either coordinating or integrating State and local sales taxes with a Federal value-added tax would be slight.
- Consumption taxes—whether the consump-

*The discussion of the value-added tax has produced a very extensive literature. The reader wanting additional information on these matters is referred to the Joint Economic Committee Hearings on the Value-Added Tax, March 21-23, 1972 and the publication. "The Value-Added Tax, A Preliminary Analysis," Taxation With Representation, Arlington, Virginia. In addition, the reader may wish to consult the various writings of proponents of the value-added tax such as Richard Lindholm, Norman Ture and Daniel Throop Smith, and its critics, Henry Aaron, John Due and Richard Musgrave. Professors C. Lowell Harris and Carl S. Shoup have also written extensively on the value-added tax as indeed have numerous others.

tion value-added tax or the retail sales taxes—often are viewed as a mechanism to accelerate economic growth. At most, they make only a marginal contribution in this direction, however. This nation has encountered difficulty in reaching full employment even though it uses more direct tax incentives. Thus, arguments for the consumption value-added tax as a spur to capital expansion and economic growth appear to be exaggerated.

- The consumption value-added tax would lead to an equivalent rise in prices, assuming the tax would be fully shifted forward and that its introduction would be accompanied by an accommodating monetary expansion. If the additional monetary supply were not provided, the result would be increased unemployment, seemingly a less palatable option than an increase in the price level. In the longer run, the inflationary effect could be more than the actual value-added tax rate as various wage contracts are tied directly to the price level via escalator clauses. A comparable situation is not found with the individual income tax.
- The value-added tax would be of no benefit to U.S. exports if it were fully shifted forward. In this case, prices would rise by the amount of the tax but the tax would be excluded from the price of goods entering into export trade—leaving the price of exports unchanged. If prices rose by more (less) than the amount of the tax, exporters would be hurt (helped), as only the amount of the tax can be removed. By contrast, a corporate income tax, is not eligible for rebate under the GATT rules, and would, if fully shifted forward, adversely affect U.S. exports. The shifting of the corporate income tax is one of the perennial controversies in economics.
- The value-added tax could either be separately quoted or hidden in product prices. State retail sales taxes are separately quoted. Separate quotation of the tax would be essential for regulated industries which otherwise would have to petition for rate increases; would facilitate rebates on exports; and most important, would clearly identify the tax payment to the taxpayer.
- As a new tax, a value-added levy would be more expensive to collect than the existing income tax both because of "start-up" administrative costs and definitional uncertainties that could result in litigation. The tax is also unfamiliar to the American businessman. A tax with a comprehensive base would require about 6 million returns, compared to about 1.5 million for the corporate income tax. The number of taxpayers could be reduced by the use of exemptions but this would endanger the neutrality and revenue-productivity of the tax. Exemptions for certain types of goods or economic activities make taxpayer compliance more difficult.

The Tax Base

- Value-added taxes are of three types. The crucial difference among them is the treatment of capital assets. Under the gross-product variant, no deduction for purchase or depreciation of capital assets is permitted. Under the income-type value-added tax, depreciation may be deducted, but not the purchase price of a capital asset. Under the consumption variant the purchase of a capital asset is deducted in the year of acquisition.
- Of the three types of value-added tax, the consumption variant is preferable as it provides the most neutral treatment of capital assets. It is also the easiest of the three to administer partly because there is no need to enter the area of arbitrary depreciation allowances. Indeed, some of the arguments made on behalf of the value-added tax are less applicable under the income-and gross-product types of tax.
- The tax liability for a firm could be calculated in three ways; by subtraction, by addition, or by a tax-credit. Under the subtraction approach, purchases are deducted from gross receipts and the tax is applied to the result. Under the addition method, payments to factors of production are added up and the tax rate is applied to the sum. The tax-credit procedure which is used in Europe, would seem to be preferable. The firm applies the tax rate to its sales and credits the tax paid to its suppliers of goods and services against its tax liability.
- Estimates of a maximum feasible tax yield for the various types of value-added tax per percentage point of rate are $8.1 billion for the gross-product type, $7.1 billion for the income type and $7.0 billion for the consumption-type. After allowance for various possible exemptions from the tax base, the estimates become $4.9 billion, $3.9 billion and $3.8 billion. These latter estimates are probably best considered as

minimum yield amounts since to go this far on the exemption front would seemingly invite re-examination of the concept of value added.

Preferred Tax Treatment

• The concept of value added is relatively simple and the arguments for comprehensive coverage of the tax are persuasive. Nonetheless it would be difficult to apply the value-added tax to certain sectors of the economy, including some services, the housing sector, the financial institutions and the government sector.

• To relieve the regressivity of the value-added tax, it is preferable to employ a vanishing or flat per capita credit rather than to exempt food outright.

• If specified commodities or services are to be exempt from the tax, the normal exemption approach—in which the firm receives no credit for the tax paid on its purchases—is preferable to the alternative ways of granting preferred tax treatment such as multiple rates, reduced base or the "forfeit" system. The zero-rate approach, in which a firm is both exempt and entitled to a credit for taxes paid on its purchases should be restricted because of its heavier revenue drain.

The Income Tax Alternative

• Increasing the personal income tax stands out as the prime alternative to imposing a value-added tax for raising additional Federal revenues. The individual income tax could be used more intensively by structural tax reform, by raising tax rates a fixed number of percentage points or by imposing a percentage surcharge. The most progressive burden distribution would result from first a tax reform package, centered mainly on closing areas of tax preference utilized by upper-income individuals, next an 11.8 percent surcharge and finally a 2.5 percentage point increase.

The Estate and Gift Tax Alternative

• Although badly in need of reform, estate and gift taxes are not—and never have been—major revenue producers. It is therefore unlikely that these taxes can be tapped to yield revenues commensurate with the broad-based alternatives.

The Federal Retail Sales Tax Alternative

• In theory, the tax base of a retail sales tax and the consumption value-added tax are essentially the same. Although State retail sales taxes cover a limited number of services, a National retail sales tax might be more inclusive. Assuming that pressures for preferential tax treatment would neither differ nor be more successfully resisted, the tax base for a National retail sales tax and consumption value-added tax should be essentially equivalent conceptually. Rightly or wrongly, both a consumption-type value-added tax and a National retail sales tax would be viewed as a direct threat to State sales taxes. On balance, the retail sales tax approach seems to offer a very slight advantage for coordinating Federal and State-local taxes, though many States would have to alter their existing taxes to assure conformity. The Federal retail sales tax would have the decided advantages of familiarity and experience based on State sales taxes. In all other respects such as burden distribution and economic effects, both the retail sales tax and the consumption value-added tax are subject to the same criticisms.

Historical Background of the Value-Added Tax

American experience with value-added taxation is limited, although this tax has been widely used elsewhere. Forms of this tax are presently used in Latin America and Europe. While the value-added tax can be traced back to the German economist, Von Siemens, in 1918, one of the earliest proposals to institute a value-added tax was made in 1950 by the Shoup Mission to Japan. The value-added tax was legislated for subnational governments in Japan but the legislation never was implemented and finally was repealed in 1954. France adopted a limited value-added tax in 1954-55 and "generalized" the tax as of January 1, 1968.

The European Economic Committee decision in February, 1967, to adopt the value-added tax for the Common Market and to make it effective January 1, 1970, provided the biggest spur to the value-added tax movement. In addition to the French tax, value-added taxes are in effect in West Germany, Netherlands, Belgium, Great Britain, Luxembourg and three Scandi-

navian countries; Sweden, Denmark and Norway. Italy was granted an extension until January 1, 1973, to implement the tax, the date on which Austria also planned to commence using the tax. Ireland and Switzerland are also planning to adopt value-added taxes.

The first U.S. adoption of the value-added tax concept was the Michigan Business Activities Tax in 1953. The Michigan tax was an impure form of value-added taxation which was replaced in 1967 with personal and corporate income taxes.

At present, the value-added tax is not used in this country at any governmental level. Nevertheless, interest in value-added taxation has continued periodically. At the Federal level, for example, the tax was considered in the early 1960s to help alleviate balance of payments deficits and sluggish economic growth. In early 1972, the value-added tax was suggested as a possible substitute for that part of the local property tax used to support public schools or, more generally, as a vehicle for providing residential property tax reduction.

The value-added tax has been recommended to several State and local governments, although Michigan remains the sole State in which a form of the tax has been tried. As early as 1932-33, studies by the Brookings Institution suggested a value-added tax for Alabama and Iowa. The 1966 Temporary Commission on City Finances proposed that New York City replace all nonproperty business taxes with a value-added tax. The tax was also proposed in 1967 to the Governor of California by the Citizen's Advisory Tax-Structure Task Force as a replacement tax for all local taxes on personal and business property and part of the State corporate income tax. The West Virginia legislature in 1967 nearly enacted a value-added tax; it lost by two votes in the State Senate. In 1970, the value-added tax was passed by the West Virginia legislature only to be vetoed by the Governor. Governor Milliken of Michigan proposed a value-added levy as part of his program to have the State government assume the financing of public education.

Applicability of VAT Precedents

Use of the value-added tax here and abroad, as well as legislative proposals for this tax source, provide considerable information and insight into the mechanical details of this tax. Prior experience is useful in defining the tax base but past experience is less helpful on other issues. For example, because many events occur simultaneously, it is difficult to isolate a cause and effect relationship between the introduction of a value-added tax and subsequent changes in price level.

It is also important to recognize the time and place orientation of value-added taxes. Circumstances in the United States do not parallel conditions that led the Common Market to adopt the value-added tax. In Europe, the desire to replace cumulative turnover taxes to avoid their pyramiding effects and the complication of the tax rebating process in international trade fostered use of the tax, which aimed to promote fiscal harmonization among countries of the European Common Market.

Replacement of turnover taxes is not an issue in this country where this tax is not used. Indeed, Professor C. Lowell Harris comments "The U.S. government does not utilize a general turnover tax and, therefore, does not have the chief reason for the adoption of value-added taxation elsewhere. . . ."[1]

Tax harmonization among cooperating countries also has no parallel here. Edwin S. Cohen summarizes his discussions with tax officials in most of the European countries that have enacted or have been giving serious consideration to the value-added tax:

> In general, I am inclined to conclude that Europeans have accepted the value-added tax primarily because of its universality and general uniformity, its great revenue raising potential for financing increased governmental services and benefits, and the efficiency with which it may be imposed on imports and removed from exports. One hears much abroad of other arguments favoring the tax, such as its capacity for combating tax evasion and for providing effective tax exemption for purchases of capital goods; but my impression is that these three points that I have mentioned—broad general uniformity, revenue potential and efficient operation regarding exports and imports—account primarily for its widespread acceptance abroad.[2]

Discussion of the value-added tax in the United States turns ultimately on the issue of whether to rely upon indirect or direct taxes to raise additional Federal revenues.

Issues Raised by the Value-Added Tax

Broad Base Levy-Large Revenue Potential

The value-added tax is favored, by some, because it is a broad-based levy which generates large revenues at relatively low rates. Yields vary with the three forms of the tax.

European countries use the consumption-type value-added tax, while some Latin American countries use the income type. The base of the consumption-type value-added tax is personal consumption expenditures, which run at a rate of $728.6 billion per year (1972, 3rd quarter, seasonally adjusted at annual rates). A 1 percent value-added tax, with no exemptions from the tax base, would yield close to $7 billion per year. Some consumption expenditures, however, are considered inappropriate items for inclusion in the tax base. For example, professional charges for services of doctors, lawyers and hospitals; the imputed value of owner-occupied housing; the cost of food, clothing and insurance, all stand as potential claimants for preferential tax treatment. Exempting these and other consumption expenditures would reduce the revenue yield.

Some economists suggest that only about 40 percent of personal consumption expenditures are amenable to forms of sales taxation.[3] The analysis of the tax base question in Chapter II of the report suggests a base that would cover 53 percent of personal consumption expenditures and would yield $2.8 billion to $3.5 billion per percentage point of rate.

For the other types of value-added tax, the revenue yield is somewhat higher. The income type value-added tax, which includes net business investment in addition to personal consumption expenditures, would yield approximately $7.1 billion per percentage point of rate (excluding, among other things, governmental purchases of goods and services). The comprehensive gross product value-added tax would yield about $8.1 billion per percentage point, but this type of tax is subject to serious objections.

All value-added tax bases are broad-based and therefore capable of generating large amount of additional revenues at relatively low rates of tax. This advantage, however, is not peculiar to the value-added tax. The base of the consumption-type value-added tax is similar to a retail sales tax confined to consumption goods and that of the income-type VAT is the near equivalent of a proportional income tax. The gross-product form of the tax has no such counterpart. Because the pressures for exemption would be similar under either the consumption value-added tax or the retail sales tax, the base for the two taxes would, at least in theory, be equivalent. Similarly, the initial impact of an income value-added tax is essentially equivalent to a proportional income tax without deductions, credits, exemptions, or allowances of any kind. Hence the tax base for these two levies is nearly identical, though the burden distributions need not be. As a method of raising substantial amounts of additional Federal tax revenues, therefore, no inherent advantage accrues to the value-added tax because of its potential tax base. The only argument might be that pressures for exemption or preferential tax treatment would either be less severe or more successfully resisted with the consumption or income form of VAT.

Strengthening the Federal Revenue System

Before weighing the pro and con arguments on the value-added tax, two facts about taxes in the United States should be explained.

First, total taxes—that is Federal, State and local—expressed as a percentage of gross national product—are comparatively light in the United States. Aggregate governmental receipts in this country for the years 1968-1970 constituted 27.9 percent of GNP, less then the percentage for such countries as Sweden (43.0 percent), Netherlands (39.7 percent), Denmark (38.7 percent), Norway (38.4 percent) and the United Kingdom (36.6 percent). Of the 23 nations for which data are available, the United States ratio was sixteenth—with Greece (26.3 percent), Australia (24.4 percent), Switzerland (21.5 percent), Portugal (21.1 percent), Turkey (20.4 percent), Japan (19.4 percent) and Spain (19.2 percent) further down the list. *(See Table 1.)* Excluding social security taxes from the tabulation, the United States placed fifteenth among the 23 nations.

The second fact concerns the composition of Federal receipts. For fiscal 1973, it is estimated that 43 percent of Federal budget receipts will be accounted for by the individual income tax, 16 percent by the corporate income tax, 7 percent by excise taxes, 2 percent by estate and gift

Table 1—Total Taxation to GNP at Market Prices (average 1968-1970)

(a) Excluding Social Security

	Country	%
1.	Denmark	35.6
2.	Sweden	34.8
3.	United Kingdom	31.6
4.	Norway	29.3
5.	Finland	28.5
6.	Canada	27.8
7.	Ireland	27.4
8.	Iceland (2)	26.7
9.	Austria	26.6
10.	Netherlands	25.5
11.	Australia	24.4
12.	Belgium	24.0
13.	Germany	23.2
14.	Luxembourg	22.9
15.	**United States**	**22.7**
16.	France	21.8
17.	Greece (1)	20.1
18.	Italy	19.2
19.	Switzerland	18.3
20.	Turkey	17.4
21.	Portugal	16.5
22.	Japan	15.8
23.	Spain	11.8

(b) Including Social Security

	Country	%
1.	Sweden	43.0
2.	Netherlands	39.7
3.	Denmark	38.7
4.	Norway	38.4
5.	United Kingdom	36.6
6.	France	36.3
7.	Austria	35.8
8.	Germany	34.0
9.	Belgium	33.8
10.	Finland	32.8
11.	Luxembourg (1)	32.4
12.	Canada	30.2
13.	Italy	30.1
14.	Ireland	29.8
15.	Iceland (2)	28.6
16.	**United States**	**27.9**
17.	Greece (1)	26.3
18.	Australia	24.4
19.	Switzerland	21.5
20.	Portugal	21.1
21.	Turkey	20.4
22.	Japan	19.4
23.	Spain	19.2

(1) Average of 1968 and 1969 only.
(2) 1969 only.

Source: Organization for Economic Co-operation and Development, *Revenue Statistics of OECD Member Countries, 1962-1970,* (Paris, 1972), p. 14.

taxes, 29 percent by employment taxes and 3 percent by other miscellaneous revenue sources. Thus, the bulk of Federal revenues come from taxes on individuals and corporations measured by income. Over the last 20 years, however, dramatic changes in the relative importance of these tax sources have occurred. Corporate income taxes and excise taxes now contribute half as much as 20 years ago to total Federal receipts. Corporate income taxes fell from 30 percent to 16 percent and excise taxes from 14 percent to 7 percent. In contrast, employment taxes have trebled, rising from 10 to 29 percent between 1954 and 1973. *(See Table 2.)*

These data suggest that a taxpayer revolt notwithstanding, the United States has additional tax room when its taxes are compared to those in other industrialized nations. The data further indicate that available alternatives for raising substantial amounts of additional Federal tax dollars are limited. Of the taxes currently available to the Federal government, estate and gift taxes, while badly in need of reform, are not major revenue producers and never have been. Employment taxes traditionally have been earmarked for social security and unemployment compensation and have not been considered appropriate sources for general revenue. The selective excise taxes have been gradually abandoned by the Federal government and few tax specialists would recommend a reversal of this trend. Thus, by the process of elimination, individual and corporate income taxes are left as potential candidates among the existing Federal taxes for raising substantial additional revenues. The alternative lies in the possibility of tapping a new tax source—consumption.

Advocates of the consumption tax approach argue that further reliance on income taxes could have undesirable effects on economic incentives. A new consumption tax source would also introduce much needed diversity into the Federal tax system. The incentive argument however, is more a matter of belief than of empirical documentation. Moreover, the impact of a tax on economic incentives represents only one of many important considerations—such as burden distribution—that must be weighted in choosing a tax instrument. If a new tax is preferred over existing taxes there is no further question of whether the value-

522-874 O - 73 - 2

Table 2 Percentage Distribution of Federal Receipts, by Source, Selected Fiscal Years, 1954-1973

Year	Total	Individual Income	Corporate Income	Excise	Estate and Gift	Employ-ment	Other
1954	100	42	30	14	1	10	1
1959	100	46	22	13	2	15	2
1964	100	43	21	12	2	20	2
1969	100	46	20	8	2	21	3
1973 (est.)	100	43	16	7	2	29	3

added tax, a National retail sales tax or some other type of consumption tax would be the best tax source.

Neutrality

The value-added tax is frequently cited for its neutrality with respect to decisions as to the use of economic resources.

Although there are many considerations to be evaluated in judging a particular tax instrument, neutrality is particularly important in that it can be dealt with best by means of structural tax policy—as is the case with equity considerations. Other indirect consequences of the tax, such as its effect on the balance of payments, economic growth, etc. relate to objectives that can also be achieved by "non-tax" mechanisms; tax neutrality and the burden of tax distributions cannot.

The consumption-type value-added tax, if levied at a uniform rate and applied to a comprehensive base, is a highly neutral tax. That is, the tax will not distort economic decisions among products or methods of production, or between present and future consumption (assuming no change in tax rate). Although there is some controversy as to whether this type of tax is neutral between savings and consumption, the single-rate, consumption-type value-added tax applied to a comprehensive base is free of various distortions inherent in the property tax.

A tax on value added—unlike the property tax—does not favor labor-intensive industries over those that are capital intensive because it applies to the value that is added in both cases. The property tax, as presently utilized by local governments also seems to distort choices of industrial location and to retard the redevelopment of core cities because of its application to improvements as well as land.

Because the value-added tax can be levied on all forms of business enterprises—corporate, partnership and sole proprietorship—it does not discriminate against any particular form of business organization. As opposed to the corporate income tax, which favors debt-financing over equity-financing (because interest payments can be deducted in determining profits), the value-added tax is also neutral with regard to the method of financing. In further contrast to the corporate income tax, value-added taxation applies to both profitable and unprofitable firms and hence casts no "protective umbrella" over the unprofitable enterprise that is inefficiently organized.

New or marginal firms would generally be hit harder by a value-added tax than by a corporate-profits levy because such enterprises, particularly the growth-oriented new business, may not reap profits during the initial phase of its operations. Nonetheless, these effects on the new or marginal enterprise are not disconcerting to proponents of a benefits-received rather than an ability-to-pay tax. Indeed, the benefits-received rationale calls for tax payments to finance the cost of governmental services which are presumed to bear some relationship to value added by the firm. Viewed from the benefits-received perspective, the value-added tax has been called the ideal business tax. Nonetheless, proponents of the ability-to-pay doctrine were successful in modifying the Michigan Business Activities Tax to incorporate special provisions for the low-profit and labor intensive firm.

One additional neutrality aspect of the value-added tax is stressed by its proponents. Because

the base of the tax is value added, taxes paid at earlier stages in the production-distribution process are not pyramided throughout the economy. Thus, no advantage accrues to the vertically integrated firm that handles internally most or all of its production process. This represents a distinct difference between value added and other cumulative turnover taxes formerly used in some European countries.

The value-added tax enjoys the reputation of being the most neutral form of taxation in theory. The neutrality argument is valid, however, only if the "ideal" type of value-added tax is enacted, that is if the tax is comprehensive in coverage and applied at a single rate. If either of these conditions is violated, however, the neutrality argument loses its validity.

In actual practice, adherence to the ideal of neutrality in the value-added tax has been sacrificed in order to accommodate other worthwhile public policy concerns. As to the comprehensive base, for example, there are some items that are very difficult to include, at least for the consumption variety of the tax. Basic necessities, many services, small businesses and transactions in money—security sales and insurance—all are exempt in one or more of the European and American value-added taxes or proposals. Both the Michigan Business Activities Tax and the proposed value-added tax for West Virginia had provisions to relieve small business.

The single-tax-rate ideal also has been sacrificed to practical necessity in several value-added tax enactments. The French tax consists of four basic rates, as does the value-added tax in Belgium. The Michigan tax used a dual rate structure as do existing taxes in West Germany, the Netherlands and Luxembourg.

The case for granting preferential value-added tax treatment, either by tax exemption or the use of a multiple-rate structure, rests on familiar arguments. Indeed, a major policy concern in any form of taxation involves the preferential tax treatment accorded certain businesses and individuals. The same pressures and public concerns are likely to apply in the case of a value-added tax, thereby resulting in preferential tax treatment for certain businesses and individuals. For administrative reasons, preferential tax treatment may be designed into a value-added tax for certain sectors of the economy. Because some erosion of the neutrality aspect of the value-added tax will occur, the claim of neutrality, while a theoretical possibility, is best evaluated in relation to an actual statute rather than a theoretical ideal.

Regressivity

By far the most frequently voiced criticism of the consumption-type value-added tax is its regressive nature. A tax is considered to be regressive if lower-income groups pay a larger percentage of income in taxes; a tax is held to be proportional if the ratio of tax payments to income is equal for all income groups and progressive, if this ratio is higher for the upper income classes. Since the lower income classes spend a higher fraction of their incomes, it follows that the consumption-type value-added tax, like the retail sales tax, hits hardest at those with the least ability to pay.

The regressive aspect of the value-added tax could be reduced or even eliminated for large numbers of taxpayers by means of exemptions and tax credits. Tax credits, while not entirely free of problems, are found to be more efficient than exemptions to alleviate the regressive impact of the retail sales tax. However, the credit helps alleviate regressivity only up to the income level at which it is phased out. Beyond that point, regressivity would persist but presumably be of less concern because it would be between the relatively affluent rather than the rich and poor. The further up the income scale the tax credit is extended, the less regressivity remains but the more costly the tax credit becomes. For example, a tax credit that would make a 3 percent value-added tax roughly proportional for families up to the $20,000 income level would make approximately 80 percent of all families eligible for a credit. Such a program, however, would cost around $5 billion.

Considerable evidence has been accumulated on how the burden of the consumption value-added tax would be distributed. Professor Musgrave, in his testimony at the Joint Economic Committee's Hearings on the Value-Added Tax, prepared estimates of tax burden for various income levels for the income tax; the value-added tax; and, a higher rate value-added tax, coupled with a credit that extended to the $10,000 income level.[4] *(See Table 3)* Column II shows the value-added tax to be regressive. Without the tax credit device, the tax burden steadily declines from 5.0 percent for those at

the $2,000 income level to only 2.0 percent for those with adjusted gross incomes of $100,000. Column III reveals how this regressive pattern is altered by the credit. Musgrave assumed the first $2,000 of consumption would be tax free; hence there is no tax burden at this income level. Moreover, because the credit diminishes up to the $10,000 income level, tax burdens increase up to this level—rising from 2.7 percent at the $4,300 level, to 2.9 percent at the $5,000 income class to 4.8 percent at the $10,000 income figure. Because the credit is not available to those with incomes in excess of $10,000, the tax becomes regressive beyond this level. At a $15,000 income, tax payments decline to 4.4 percent; at $50,000, to 3.0 percent and at a $100,000 income, the tax burden is only 2.4 percent of income.

Two points deserve emphasis when comparisons are made between the value-added tax and the income tax for raising a given amount of additional Federal tax revenues. Column I of

Table 3—Burden Impact of Raising $25 Billion in Alternative Ways (Tax as Percent of AGI)

Adjusted Gross Income	Income Tax[1] I	Value-Added Tax, 5%[2] II	Value-Added Tax, 6% with Credit[3] III
2,000	—	5.0	—
4,300	—	4.5	2.7
5,000	0.49	4.4	2.9
10,000	2.26	4.0	4.8
15,000	3.03	3.7	4.4
50,000	5.96	2.5	3.0
100,000	8.63	2.0	2.4

[1] Joint returns, four exemptions. Above $15,000 assumes 10% as deduction. All income fully taxable. Assuming the yield from present rates at $100 billion, the above equals one quarter of present liabilities to yield $25 billion.

[2] Ratios estimated with reference to *Tax Burden and Benefit of Government Expenditures by Income Classes 1961 to 1965,* Tax Foundation, 1967. These estimates, especially for higher incomes, should be taken as illustrative.

[3] $2,000 of consumption is tax free. Credit of $100 to vanish by $20 for each $1,000 of income in excess of $5,000.

Source: Richard A. Musgrave, *Appraisal of Value-Added Tax,* Statement before the Joint Economic Committee, Hearings on Value-Added Tax, March 23, 1972.

Musgrave's data shows that the burden of the income tax is progressive throughout the income scale. Equally important is the fact that up to a point above the $15,000 income level, the burden is lower under the income tax than under either form of the value-added tax, even when a credit is used.

The Brookings Institution also has prepared burden distributions for five possible ways of raising additional Federal revenues:

- structural reform of the individual and corporate income tax—that is, reducing various sources of preferential tax treatment to individuals and businesses;
- raising income tax rates by imposing a percentage surcharge;
- raising income tax rates by a given number of percentage points;
- adopting a value-added tax with exemptions for rent, food and medical care; and
- adopting a value-added tax with a low income credit but no exemptions.

By far the most progressive distribution is secured through their particular income tax reform approach. *(See Table 4.)* Second is the income tax surcharge method. By way of contrast, the value-added tax—even with rent, food and medical care exempt from the tax—is regressive across the income spectrum. The value-added tax coupled with a tax credit but with no exempt items is progressive up to the $20,000 to $25,000 income level and regressive beyond—not materially different from the burden distribution that would result from raising income tax rates by a given number of percentage points. Even in that case, however, the tax burdens imposed by the percentage-point increase to the income tax would be generally lower than those imposed by the value-added tax with credit for individuals with incomes up to the $25,000 to $50,000 level; the added burdens under the percentage point approach become uniformly and significantly higher at incomes above $50,000.

Regressivity of the value-added tax can be modified by use of the tax-credit device. Some critics, however, consider the credit an unnecessary encumbrance when a superior alternative—the income tax—is readily available. Moreover, the desired burden distribution can be achieved by altering the income tax rate schedule, seemingly no less difficult politically

Table 4—Current Effective Individual Income Tax Rates and Rate Increases under Various Methods of Raising Additional Revenue, by Income Classes, 1972 (numbers in percent)

		Increase in Effective Rate[a]				
			$12 billion Tax Increase			
Income Class[b] (in thousands)	Effective Rate, Current Law	$10 billion Tax Increase — Income Tax Reform[c]	Income Tax Surcharge[d]	Percentage Point Income Tax Increase[e]	Broad-Base Value Added Tax With Credit[f]	Narrow-Base Value Added Tax[g]
0-1	0.5	0.3	0.1	0.1	0.1	1.8
3-5	1.7	0.1	0.2	0.3	0.6	1.5
5-10	5.1	0.2	0.6	0.8	0.8	1.5
10-15	8.6	0.4	1.0	1.2	1.1	1.4
15-20	10.5	0.6	1.3	1.5	1.7	1.4
20-25	11.8	0.7	1.4	1.6	1.9	1.3
25-50	13.9	1.2	1.7	1.6	1.7	1.2
50-100	22.2	3.0	2.6	1.8	1.1	0.7
100-500	31.0	8.4	3.5	1.6	0.8	0.5
500-1,000	32.8	16.3	3.9	1.3	0.4	0.2
1,000 and over	34.2	19.0	4.1	1.3	0.2	0.2
All classes[h]	11.0	1.1	1.3	1.3	1.3	1.3

[a]Tax as percent of income.
[b]Income is equal to the sum of adjusted gross income, transfer payments, state and local government bond interest, and excluded realized long-term capital gains.
[c]Tax reform package 3 outlined in Table 14-2.
[d]Surcharge of 11.8 percent on 1972 income tax liabilities.
[e]2.5 percentage point increase applied to each bracket rate.
[f]Broad-base value added tax at 3.25 percent with full credit up to $5,000 for a four-person family; credit is phased out completely at $20,000.
[g]Narrow-base value added tax at 3.0 percent.
[h]Includes negative income class not shown separately.

Source: Charles L. Schultze, Edward R. Fried, Alice M. Rivlin and Nancy H. Teeters, *"Setting National Priorities, the 1973 Budget,"* Brookings Institution, Washington, D.C., p. 441.

and far less cumbersome administratively than adoption of a major new source of Federal revenue coupled with a tax-credit device.

Proponents of the tax-credit contend that it successfully removes the most regressive aspects of the value-added tax. They argue that the relevant consideration is not how the burden of a particular tax is distributed but how the burden of all taxes compares with the distribution of benefits.

These arguments ultimately come down to the question of regressivity vs. progressivity of a change in the Federal tax structure. If progressivity of the total tax burden is accepted, adoption of a value-added tax with a credit would make the total tax burden less progressive than increases in the income tax. If the tax-benefits consideration is examined, it turns out again that overall progressivity is reduced. Since the expenditure-benefits distribution is given regardless of the tax source, coupling this consideration with a value-added tax rather than the income tax, will result in a less progressive distribution of the overall burden. Whether the issue is a particular tax instrument —value-added vs. income tax—or the burden of all taxes, or the tax burden-expenditure benefit, the addition of the value-added tax to the tax system is either regressive or proportional while the income tax alternative is progressive.

Intrusion Into State-Local Tax Sources

The National Governors' Conference at its June, 1972, meeting in Houston took the position that "the value-added tax would directly compete with State sales tax in 45 States. . . ."[5]

Although the governors' viewpoint may be difficult to sustain in economic terms, their assessment of the intergovernmental impact of a value-added tax highlights potential Federal-State-local tension.

At the outset it should be noted that tax overlapping rather than separation of tax sources is the practice in this country. All three governmental levels use personal income taxes and selective sales levies. Economists would question the implicit assumption that there is some upper limit beyond which taxes cannot be pushed. They would note that if such upper limits did exist, it is not clear that present tax rates—either in the aggregate or for a particular tax source—are near the peril point. They would further claim that prior use of a tax source by one governmental level has never precluded its use by another. Historically, the Federal government adopted both its income and death taxes after States had entered these tax fields. Thus, the economic arguments that Federal use of consumption taxes would constitute an unwarranted intrusion into the fiscal domains of States and localities seem thin.

The governors can argue that the public, nonetheless, will react in a manner adverse to the State interest if the Federal government enacts a value-added tax. They can cite the years between 1938 and 1961 when the Federal government made intensive use of the individual income tax, effectively precluding State governments from adopting this tax source. The governors can note further that a Federal tax on top of existing high State and local sales taxes would seriously hinder the future ability of States and localities to tap this tax source more intensively in the future. The psychological limit on taxation would be most evident if a Federal consumption tax were separately stated. This argument, therefore, sees State interests threatened by a proposed new Federal tax on consumption which would more directly impede State-local tax raising efforts than would higher rates or more intensive use of the income tax.

Professor Papke, who views a value-added tax as uniquely desirable for subnational governments, sees a second possible intrusion. His case rests on the value-added tax as a benefits received levy and as an origin-based business tax. Professor Papke states this position:

> While the Federal TVA (tax on value added) is nothing more than a disguised retail sales tax, a TVA imposed by an individual State, operating in an open economic system, is the only device by which a State can reach all incomes arising within its borders or the value of all goods and services provided therein. A TVA is based on the dollar value of the contribution of the business enterprise to the output of goods and services in the State. The advantage of TVA levied at the subnational level is that it relates a business' tax liability directly to its use of economic resources—capital, labor, land and entrepreneurial skills. The logic or rationale of the tax rests squarely on the benefits received principle of taxation—government services are essential to the operation of any business enterprise, regardless of profitability, and a part of these public service costs should properly be included in the cost of doing business.
>
> The subnational TVA reaches incomes before they are distributed in the form of wages, interest, rents and profits and goods before they are exported. In short, it addresses itself directly to the problem of the inaccessibility of State tax bases, especially as it relates to subnational business taxation."[6]

There seem then to be two intergovernmental strikes against a Federal consumption-type value-added tax:

1. It is viewed, rightly or wrongly, as an intrusion on the State-local use of the sales tax.

2. It cannot readily be coordinated with the retail sales tax of States and localities.

Nevertheless, it does not necessarily follow that because of these strikes, the Federal VAT is necessarily out. There are distinct advantages to the consumption form of value-added tax, though these do not seem to be in the area of intergovernmental fiscal relations. Equally important, there are economic, social, and intergovernmental cons against alternative sources of Federal revenues. What does seem clear at this point is that a Federal value-added tax is not a "natural" in terms of its intergovernmental consequences. State-local opposition has indeed already formed.

Effect on Savings, Investment and Economic Growth

Among the three types of value-added tax, the consumption variant most favorably affects the rate of savings. Taxes on consumption—in-

cluding the retail sales tax—put a premium on saving as that part of income which is saved—not consumed—is tax free. This contrasts with the personal income tax in which income, whether saved or consumed, is taxed. Indeed, with the income tax there is the historic "double-tax" controversy concerning income earned from invested savings, which is also taxable.

Substituting a consumption for an income tax would promote savings by an individual. Extended to the economy as a whole, however, increased savings would shrink the total national income, with reduced aggregate savings the result. Nonetheless, some empirical evidence suggests that the rate of savings would respond modestly to changes in the interest rate. Savings is not, however, the end objective. Proponents of consumption taxes want to increase the rate of savings at full employment, to make more investment possible, and hence to accelerate the rate of economic growth. While this is seemingly the direction in which consumption taxes are likely to work, the studies of Denison and others lead to the conclusion that the rate of economic growth is responsive to a number of socio-economic factors but not critically amenable to influence by any one such variable. Furthermore, the investment function is generally considered more dynamic and more sensitive to changes in the rate of interest than the savings function.

Not all share the general assessment that the present U.S. economy is in need of an upward tilt, however slight. The problem in recent years has been to achieve full employment growth; not to increase our potential but to reach that which is already attainable. In the face of substantial idle plant and equipment, remedies that would foster accelerated growth appear misplaced. Investment tax credits and rapid depreciation write-offs already are available to spur business investment. Arguments for consumption taxes—whether value added or national retail sales—as a further spur to capital formation seem decidedly strained.

Nonetheless, if a spur to capital formation via tax policy were the accepted goal and if we were to start with a clean slate, the consumption value-added tax could be a simpler mechanism than the special devices grafted onto the income tax code to achieve this objective.

Infaltionary Potential

A key question in the debate over the value-added tax is its effect on the price level. Experience with value-added tax enactments abroad is of limited value. Because many factors affect prices, it is difficult to isolate changes in price levels associated with the introduction of the value-added tax. Moreover, the price level is influenced by overall monetary and fiscal policy rather than a particular tax.

The simplest—and perhaps most accurate—assumption is that prices would rise by the rate of the value-added tax. Thus, a 3 percent value-added tax would increase prices by 3 percent if business shifts the tax fully forward to consumers. If the tax were not fully shifted forward, profits and/or wages would be reduced, followed by higher rates of unemployment. Confronted with a choice between greater unemployment and higher prices, monetary authorities seem more likely to acquiesce to the latter.

Two situations lead to a different result. Monetary-fiscal policy may be sufficiently stringent to prohibit an increase in price levels equivalent to the rate of the value-added tax, in which case business or labor or both would be forced to absorb some of the tax. On the other hand, monetary-fiscal policy may not be sufficiently fine-tuned to confine the rise in prices to the rate of the value-added tax.

European experience on this score reveals divergent results. In Denmark, a single-rate value-added tax of 12.5 percent was introduced in July 1967 with a broader coverage of goods and services than the wholesale sales tax it replaced.

Prices rose by 7.3 percent in the six months following introduction of the value-added tax and by 12.3 percent after a year. The Monopoly Board of Denmark, which studied product prices before and after the adoption of the value-added tax, concluded that, with few exceptions, business firms changed prices in line with the tax differential.

French experience differed. A multiple-rate value-added tax was introduced to replace taxes of almost equivalent scope. Prices rose by 2.6 percent in the subsequent six months and by 6.2 percent within a year. Economic conditions at the time of introduction, however, were quite different in France than in Denmark.

Prices in France had been rising moderately, as had industrial production, while wages were rising rapidly. A nationwide strike in the six-month period after introduction of the value-added tax also complicated the picture.

German experience—a model of relative price stability following introduction of the value-added tax—differs again. A dual-rate tax -5.5 percent and 11.0 percent—was introduced in January, 1968, a direct replacement for a cumulative multi-stage turnover tax plus a special turnover tax on transportation. Prices had risen by only 0.9 percent six months after the value-added tax was introduced and one year later the increase was only 2.7 percent. This relative stability is partly due to the fact that, in the year preceding introduction of the value-added tax, prices and wages had shown little movement while industrial production was rising.

Experience in the Netherlands shows the other extreme. In January, 1969, the Dutch government introduced a value-added tax generally of equivalent scope to that of the tax it replaced. The economic context was of rapidly rising industrial production, consumer prices and hourly wage earnings. The price level after six months had risen by 6.3 percent—far in excess of governmental anticipations. As a result, the government decreed maximum amounts of further price increases. The price level showed little further change, with the increase being 7.1 percent one year after adoption of the value-added tax.

This divergent experience nonetheless leads to certain conclusions on the immediate impact of introducing a value-added tax on the level of prices. Prices are less likely to be affected if the tax is introduced: (a) when wages and prices are relatively stable, as they were in Germany, (b) when the tax replaces another levy rather than supplements existing revenue sources, and (c) when government and business can reach accommodations to minimize unwarranted price increases.

This immediate impact of a value-added tax on prices as described above, may not hold in the long run. As prices are increased, workers can be expected to press for wage increases to maintain their real standard of living. This conceivably could lead to a wage-price spiral because wages in certain industries have "escalator clauses" designed to compensate for increases in the cost of living. Thus, actual increases in prices could exceed the initial stimulus to prices immediately following adoption of the value-added tax. The value-added tax would seem to have a much greater effect on subsequent wage negotiations than an increase in the personal income tax because the latter does not get imbedded in the general price level (although an increase in the income tax may set off attempts by workers to maintain real standards of living through collective bargaining). The significance of the inflationary potential in the value-added tax diminishes alongside the alternatives of the Federal government adopting new or making more intensive use of other indirect taxes.

Stimulus to Exports

One of the most frequent claims for the value-added tax is that it will stimulate United States export of goods and services and thereby aid our balance-of-payments position. This claim stems from the General Agreement on Tariffs and Trade (GATT) regulations, which permit a country to rebate indirect taxes—but not direct taxes—on exported goods. On the import side, domestic indirect taxes are added onto the price of imported goods.

The value-added tax provides an actual stimulus to exports only under an unusual situation. If a value-added tax were adopted and fully-shifted forward, prices could be expected to rise by the amount of the tax. The tax is rebatable on exports, so it would be taken off those goods and services entering into international trade. The net change in the price of exports therefore would be zero. In effect, the new tax would be levied on the export firm and then removed, leaving the exporter no better—and no worse—off than before introduction of the tax.

The value-added tax could actually burden exports under two kinds of economic conditions. In the first case, upon adoption of the value-added tax, prices might rise by more than the rate of tax. After removing the tax on exports, the goods would nonetheless be less competitive in international trade. In the second case, upon adoption of the value-added tax, prices might rise less than the rate of the tax and when fully rebated unduly benefit exporters. A major new Federal tax, however, would be a crude and complex way of stimulating exports. Other mechanisms are available to

spur exports directly such as the DISCs—where the Federal income tax on an exporting firm is deferred—and devaluation of the dollar.

Compared to other alternative sources of revenue for the Federal government, the value-added tax offers little incentive to exports. The one situation it might is where instead of a value-added tax, the Federal government raised additional revenues from the corporate income tax. If this tax were shifted forward to the consumer—a subject of continued controversy among economists—exporters would be in a less favorable position than if the value-added tax were used. As a direct tax under the GATT regulations, the corporate income tax could not be rebated while the value-added tax could. If the corporate income tax were not shifted forward, there would be no relative advantage from the use of the value-added tax. Domestic prices would be unaffected by the higher corporate levies and the inability to rebate the tax on exports would leave the price level unchanged in regard to competitive prices abroad.

European value-added taxes, it should be noted, did not replace corporate income taxes. European countries have corporate income tax rates comparable in height to our own. Thus, if corporate taxes are shifted forward to a comparable degree by both American and European firsm, no competitive disadvantage from taxation applies to United States firms engaged in international trade. Replacing the U.S. corporate income tax with the value-added tax might raise the issue of unfair trade practices and invite retaliation.

The value-added tax offers no advantage as a stimulant to exports compared to some other sources of additional Federal revenue. A National retail sales tax would be considered an indirect tax under GATT regulations and therefore also rebatable. More intensive use of the personal income tax would also leave the exporters' position unchanged since there is no evidence to suggest that higher personal income taxes lead to increases in domestic price levels.

The limited initial advantages of a value-added tax to stimulate exports, may be further eroded by long-run effects of the tax on price levels. If the tax affected the cost of living and thereby influenced wage negotiations, the resulting higher prices would adversely affect exports. To the extent that a value-added tax would have greater impact on prices than the personal income tax, adoption of the VAT could hurt rather than help the trade position of United States.

The foregoing analysis suggests that a change in the Federal tax structure to raise substantial amounts of additional Federal revenues is a cumbersome and questionable mechanism for stimulating exports. Further, a value-added tax would have no advantage for this purpose over alternative taxes—the personal income tax or a National retail sales tax. Under certain assumptions, however, the value-added tax would have an initial and perhaps long-range advantage over the corporate income tax with regard to effects on exports.

Hidden vs. Separate Statement of the Tax

The value-added tax, at least as utilized on the European continent, is hidden to the final consumers, except in Denmark. The price paid by a European consumer upon purchase of goods or services includes the applicable tax but this is not explicitly stated as a part of or an addition to the purchase price. Thus, the European value-added tax experience contrasts with State retail sales taxes, where the applicable tax rate is added on to the purchase price.

The consumption value-added tax is not inherently different from the retail sales tax, with regard to whether it can be hidden in the price or be separately stated. Nor can it be said that the value-added tax is the only tax hidden in purchase prices. To the extent that other taxes are passed on to the consumer, they also are hidden.

The argument that the consumption value-added tax should be hidden is difficult to defend because it is generally agreed that the tax is intended to be shifted forward to the final consumer. From a practical point of view, to hide the value-added tax in the purchase price would present serious problems for regulated industries.

Such enterprises would be forced to seek authority from the regulatory authorities to increase their prices—a process that might be cumbersome and time-consuming. This process could be avoided for the utilities if a value-added tax were separately stated.

Separate statement of the tax seems distinctly preferable. If a single rate of tax were applied to a comprehensive base, explicit quoting of the tax should facilitate rebates on export items and

increase consumer pressures to keep prices no higher than warranted by the rate of the tax. Moreover, it would be cheaper for business to state the tax separately than to readjust product prices, especially if the value-added tax were to have several rates and numerous exemptions.

Administrative Considerations

Assuming the consumption value-added tax was a single-rate broad-based tax, the problems of taxpayer compliance would be of secondary concern. Like any new tax, however, a value-added tax would involve relatively heavy initial costs of tax administration.

Two additional problems in starting up would be:

First, American businessmen are unfamiliar with the tax and—depending on its structure—would need to keep additional records, beyond those necessary for the personal income tax or even a new source of Federal revenue, such as a National retail sales tax.

Second, the value-added tax, if applied to a comprehensive base, would require six-to-nine million corporations, partnerships and sole proprietorships to file additional tax forms. These numbers are considerably larger than the 4.1 million registered vendors under State retail sales taxes or the 1.5 million firms filing corporate income tax returns.

Both thses disadvantages can be overcome with exemptions, but the exemption technique itself presents additional taxpayer compliance burdens. The self-enforcing character of the value-added tax would be undermined as the cycle of tax liabilities offset by tax credits is broken by exemptions. Further, purchasers and sellers are required to separate taxable and tax-exempt transactions to determine their value-added tax liabilities, a process which renders enforcement and audit more difficult.

The costs associated with administering a value-added tax depend critically on the simplicity of the levy. A single-rate, comprehensive value-added tax presents the twin disadvantages of a large number of taxpayers and the unfamiliar nature of the tax. The use of exemptions, multiple tax rates and possible other devices for preferential tax treatment, however, serves mainly to complicate further the administrative problems.

The self-enforcing aspect of the value-added tax—an important consideration for countries with tax compliance problems—has little significance for the United States. By and large, taxpayer compliance is quite adequate for both the Federal income tax and the State retail sales tax, even from the small retailer. Thus, self-enforcement, is a far less relevant consideration in this country than elsewhere.

FOOTNOTES

[1]C. Lowell Harris, "Value-Added Taxation," reprinted in *Innovations in Tax Policy and Other Essays, Selected Writings of C. Lowell Harris*, John C. Loncoln Institute, Hartford, Connecticut, 1972, p. 258.

[2]Honorable Edwin S. Cohen, "Foreign Experience With a Value Added Tax," *Proceedings of the National Tax Association Seminar on Balancing Our Federal-State-Local System*, Vol. XXIV, No. 3, September 1971, p. 400.

[3]See, for example, William Fellner "Possibilities of Broadening the Tax Base, Reducing Tax Rates, and Promoting Economic Growth," Tax Revision Compendium, U.S. Congress, House of Representatives, Committee on Ways and Means, Washington, D.C. 1959, p. 195. Also Douglas H. Eldridge, "Equity, Administration and Compliance and Intergovernmental Fiscal Aspects" in *The Role of Direct and Indirect Taxes in the Federal Revenue System*, A Conference Report of the National Bureau of Economic Research and the Brookings Institution, Princeton University Press, Princeton, New Jersey, 1964, pp. 64-172.

[4]Richard A. Musgrave, *Appraisal of Value-Added Tax*, Statement before the Joint Economic Committee, Hearings on the Value-Added Tax, March 23, 1972.

[5]*N.Y. Times*, June 8, 1972, p. 25.

[6]James A. Papke, Discussion, *Proceedings of the National Tax Association Seminar on Balancing Our Federal-State-Local Fiscal System*, Vol. XXIV, No. 3, September 1971, p. 415.

Chapter II

The Value-Added Tax Base: Defined, Analyzed And Estimated

The Concept of Value-Added

The value-added tax is a levy on 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. Upon completion of this processing or handling, the firm sells its product either to the final consumer or to another business firm. The amount of value added can be measured then as the difference between the dollar amounts of the firm's sales and its purchases from other business entities.

This dollar amount of value added is equivalent to the payments the business makes for use of labor and capital equipment—that is, to the sum of its payrolls, interest and rental payments to individuals and "profits."* The sum of these factor payments reflects the activity of the firm's employees, the services rendered by individual creditors and lessors of the firm and the reward to the owners for risk-bearing. For the economy as a whole, therefore, the value-added tax is a tax on the total income of the economy or the total product of the economy. This equivalence is to be expected since, under national income accounting, total product for a given time period is equal to the total income paid to the factors of production that turn out that product.

The value-added tax base may be viewed as either a tax on product or a tax on income; it is not, however, a tax on total sales in the economy. Total sales is a much larger figure because of "double-counting," where initial sales by manufacturers to wholesalers appear again in the sales of wholesalers to retailers and again in the sales of retailers to the final consumer. Since all goods and services are ultimately sold, however, total value added is the same as total final sales, assuming zero net investment, no inventory change and no foreign trade.[1]

The Value-Added Tax: A Simplified Example.

The simplified example tracing a loaf of bread from the farmer to the final consumer illustrates the value-added tax. (See Chart 1.) A farmer produces a quantity of wheat and sells it to a miller for four cents; if he has no purchases associated with the growing of this wheat, then his value added is four cents. The miller, who buys the wheat, grinds it into flour and then sells the flour to a baker for 10 cents, has added value of 6 cents to his initial purchase. The baker, after purchasing the flour for 10 cents, makes the dough and bakes the bread, which he then sells to the grocer for 22 cents adding value of 12 cents. The grocer makes the bread available to the consumer, whc pays 30 cents for it—8 cents of which represents value added by the grocer. The final price of 30 cents paid by the consumer, then, is equivalent to the sum of the values added in each step of the production process—4 cents by the farmer, 6 cents by the miller, 12 cents by the baker and 8 cents by the grocer.

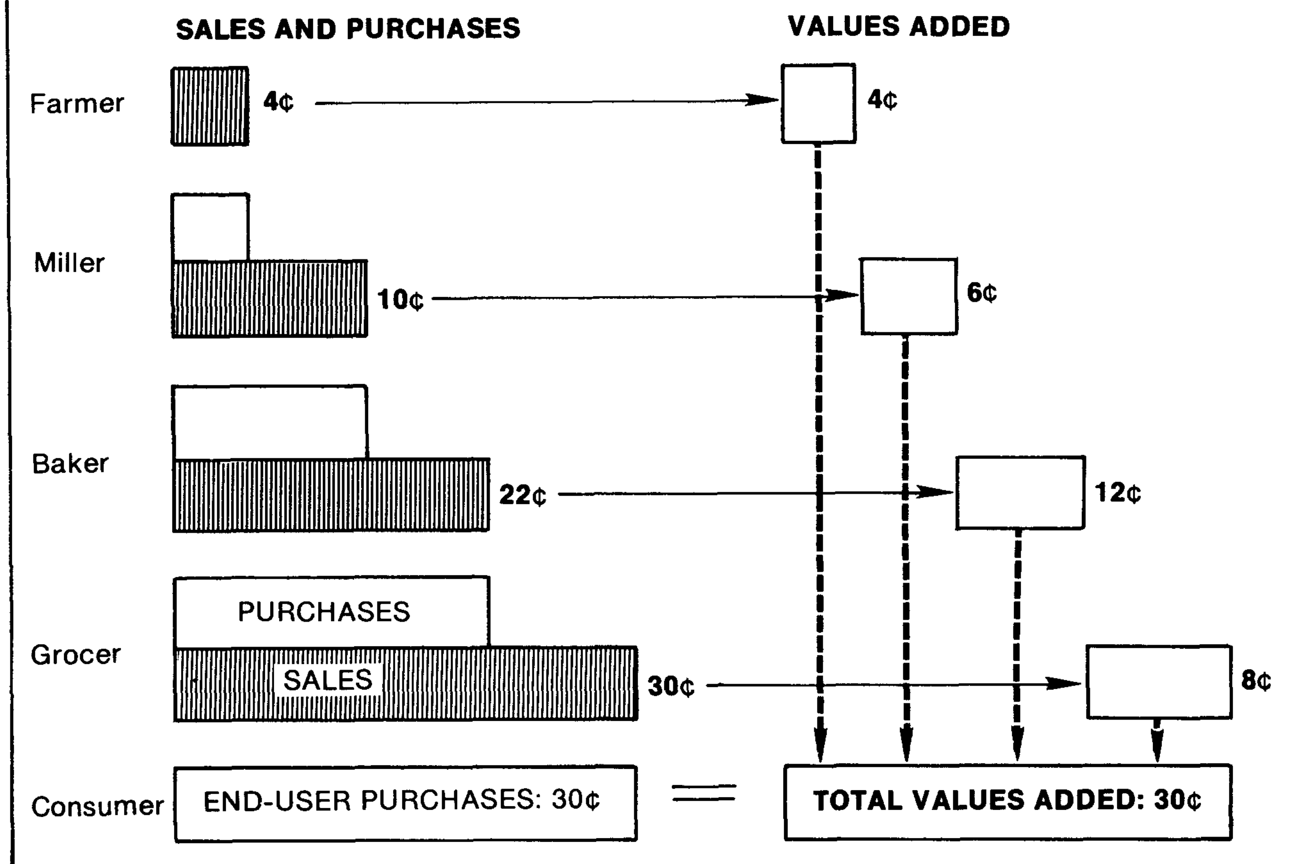
The values added at each step of the production process form the base of the tax. Taking the baker as an example, assume he bakes 1000 loaves of bread a week. The ingredients he buys from the miller cost $100 (.10 cents × 1000), his gross receipts or total sales are $220 (.22 cents × 1000). The difference—$120—is the value added by the baker. It is on this amount that the value-added tax is levied. Thus, if the value-added tax rate is 2 percent, the grocer pays $2.40 in tax to the government ($.02 × $120).

In the course of tracing the loaf of bread from the farmer to the consumer, each intermediary subtracted the costs of his purchases from his selling price to determine value added. For application to more complex business activities, gross receipts include all receipts from the operation of the business—receipts from the sale of goods and services, income from professional services, royalties, etc. The business then deducts the cost of inter-firm purchases from that total. Typical costs that would be deducted are:

1) cost of merchandise and supplies purchased;
2) advertising, freight and postage;
3) electricity and other utilities;
4) insurance and repairs;
5) travel expenses;
6) losses from bad debts;
7) legal and professional services;

---

*Profits are defined somewhat differently for the three variants of the value-added tax.



8) taxes and fees (aside from taxes on or measured by income, taxes withheld or collected from employees, or taxes not related to the business operation from which the gross receipts were derived); and
9) capital assets—at least under some versions of the value-added tax.

Types of Value-Added Tax

Three types of value-added tax can be distinguished.

- The gross product value-added tax, so called because the base conforms most closely to the gross national product account in the national income statistics;
- The net income-type, with national income its closest counterpart in the national income accounts; and
- The consumption-type, corresponding most nearly to the personal consumption account in national income statistics.

The essential distinction between these three variants is their treatment of capital goods—that is, items such as machinery, buildings, equipment, furniture and vehicles or any asset that will not be used up entirely within the tax year of purchase.

Gross Product Value-Added Tax

Under this approach, the business is not permitted to deduct the cost or the depreciation on capital goods purchased from other firms in calculating its tax liability. Purchases of goods and services from other firms that are entirely used up in the current year—that is, purchases on current account—can de deducted.

To illustrate the gross product value-added tax base, assume a firm has only the following

three transactions in the course of its taxable year:

a) gross receipts of $125,000;
b) a $10,000 purchase of a machine; and
c) a $25,000 purchase of materials and supplies.

For this firm, the gross product value-added tax base will be $100,000 ($125,000 in gross receipts less $25,000 in purchases on current account). No deduction is permitted for the $10,000 machine since this is a purchase of a capital asset. Of the three types of value-added tax bases, the gross product version places the heaviest tax liability on capital goods and therefore may influence firms to minimize the use of capital assets. Further, if one assumes that the tax on capital goods is shifted onto the prices of consumption goods produced with them, the gross-product variant constitutes a double tax in the final purchase price of the consumer good. Capital goods are taxed at the time of purchase and again when they are sold item by item to consumers (as the assets are being used up during their useful lives). Thus, an asset with a useful life of two years would be subject to this "double-tax"; if the same item had a useful life of one year, it would be deductible since it would be treated the same as a purchase of materials and supplies—that is, for current production.

Income-Type Base

Under this type of tax, the cost of a capital asset again is not deducted when it is purchased. The income-type tax base does, however, permit the firm to deduct the amount of depreciation that occurs in a given year on its capital assets. Under the usual definition of the income-type value-added tax base, depreciation is allowed on all capital assets, whether old or new. Depreciation could, however, be limited only to capital assets purchased after the adoption of the tax.

If, to the previous three transactions of the firm, an item for depreciation of its purchased machine is added—say $1,000 for the year—then the income-type value-added tax base would be $99,000 ($124,000 gross receipts from sales less $25,000 for purchases of materials and supplies, less $1,000 for depreciation of the machine during the year).

The income-type value-added tax is complicated by the fact that it involves the depreciation of capital equipment. Computation of depreciation is just as complex under this variant of the value-added tax as it is under the income tax system. Because the income variant requires separating purchases and sales of both capital and current goods, it is more difficult to administer than the third type of VAT, the consumption variant. Indeed, because the treatment of depreciation allowances is one of the more arbitrary elements of the income tax, there is some opposition to the income-type value-added tax on this basis alone.[2] Nonetheless, the net income-type of value-added tax was the variant preferred by National Tax Association Committee on Personal Property Taxation. The report of that Committee did not discuss the gross product type of value-added tax, but did mention the proposed Japanese value-added tax, a consumption-type value-added tax. Following this discussion, the NTA Committee stated, "While the above-described arrangement was perhaps appropriate for the Japanese economy and has the notable advantage of simplicity to commend it, we are inclined to the conventional view that depreciation should be deductible."[3]

Consumption-Type Value-Added Tax

The consumption-type of value-added tax provides the most nearly neutral treatment of capital assets. Under this tax base, a firm that purchases a capital asset may deduct, in the year of purchase, the full value of this purchase. In contrast to the income-type value-added tax base, where depreciation is deducted year by year, the consumption value-added approach permits no adjustment for depreciation since to do so—after allowing deduction of full value in the year of purchase—would amount to deducting the price of the capital good twice.

The name consumption-type value-added tax is appropriate because the value-added represented by the capital equipment is not subject to tax until later years, as the equipment is being consumed in the process of production. In effect, the immediate tax rebate granted to users of capital equipment imposes the tax only once—on gross proceeds of the sales of the goods and services produced by the capital equipment. Funds are not tied up for tax purposes as under the income variant of this tax.

The consumption variant, then, is equivalent to instantaneous depreciation of these capital acquisitions.

Using the same illustration, the tax base for the firm in question under the consumption-type value-added tax would be $90,000. This is arrived at by taking the $125,000 in gross receipts from sales and subtracting purchases on both current account ($25,000 for materials and supplies) and capital account ($10,000 for the machine).

The treatment of capital goods differs between the income and consumption variants of the value-added tax. Yet, ultimately the same total is subtracted from sales for each piece of equipment. The significant difference centers on the time path for the value-added. Under the consumption-type tax (where the purchase is deducted in the year of acquisition), the value added is smaller the first year but larger each of the following years than if the income-type value-added tax were applied. Further, with the consumption variant of the value-added levy, the tax deduction is restricted to new purchasers of plant and equipment. Owners of capital assets purchased before imposition of the tax receive no reduced tax liability since there was no tax included in the purchase price; they do, of course, when these assets are added to or replaced.

Types of Value-Added Tax Compared to Other Taxes

For the private sector, the gross product type of value-added tax is equivalent to a tax on all personal consumption expenditures—goods and services—plus a tax on business gross investment. As such, the tax can be viewed as a general sales tax on all final products or a flat rate tax on the gross national product.

Because depreciation charges are deducted from the base of the income-type value-added tax, this tax base would be equivalent to a tax on all personal consumption plus a tax on *net* (rather than gross) business investment. The income-type value-added tax has been likened to a proportional tax on national income or a general sales tax on consumption of goods and services plus purchases of capital net or depreciation. The consumption-type value-added tax is generally thought to be a flat-rate tax on consumption or the equivalent of a theoretical retail sales tax applied to consumption of goods and services used for current consumption.

The view that the income-type value-added tax is the equivalent of a proportional income tax (assuming no exemptions or non-business deductions) and that the consumption-type value-added tax is identical to a consumption tax is not universally accepted.

The income value-added tax must be adjusted to have a full equivalence with the income tax—either combining the income-type value-added tax with an income tax on earnings from capital purchased tax free or by disallowing the deduction for depreciation charges from "old" capital.[4]

This may be a short-run complication as eventually all capital assets will be new; it can, however, be quite significant at the outset. Lacking this, earnings from existing capital stock would be tax-free, and capital gains will be realized. Thus, the income tax and income-type value-added tax would have equivalent tax bases if the economy were in equilibrium with zero capital stock or if the existing capital stock were fully depreciated. To the extent that undepreciated capital stocks are present, the tax base of the consumption value-added tax would differ from a flat-rate tax on consumption. Given a non-depreciated capital stock, since the consumption variant of the value-added tax does not permit a deduction for depreciation, these charges would be included in the tax base of a consumption value-added tax but excluded from the base of a consumption tax.

Professors Due and Friedlander further argue that the equivalence of tax bases does not make the two taxes equivalent in price and other economic effects. Professor Friedlander focuses on the treatment of untaxed capital stocks, and concludes "if the tax bases are identical, relative prices will be different, while if relative prices are identical, the tax bases will be different under the usual definition of an IVA (income-type value-added tax) and an IT (income tax)."[5] Regarding the consumption tax question, she states, "In the case of a CT (consumption tax) and a CVA (consumption-type value-added tax) the usual definition of the CVA leads to different tax bases, but identical relative prices with respect to a CT."[6]

Due takes the position that, at least in non-perfectly competitive markets, taxes on capital equipment are just as likely to be shifted forward as are taxes on other goods and services. He concludes that there is little difference between the income-type and consumptive-type value-added taxes:

> Thus, it is concluded that both the consumption and income forms of value-added tax should be regarded as sales taxes, since they produce the same general price effects as retail sales taxes, raising the prices of consumption goods relative to incomes received by factors. They are thus likely to have virtually the same incentive effects.[7]

This conclusion, however, relies heavily on the assumption of non-competitive markets. If perfectly competitive markets and non-rigid production functions are valid assumptions, the income-type and consumption-type value-added taxes would differ in economic effects and the income-type value-added tax would be generally similar—though not necessarily identical—to a proportional tax on factor incomes (assuming no exemptions or deductions).

Choice of the Value-Added Tax Base

There are several reasons for preferring the consumption value-added tax, where capital acquisitions are deducted in the year of purchase. One of the most important advantages is that it would be far easier to apply—a very practical concern for matters of tax administration. Unlike the income-type base, there would be no need to distinguish between intermediate and capital goods. With the consumption variant, the tax credit would be allowed on all business purchases—capital and inventory. Hence, there is no need to account for each such item, either by the business firm or by the government. The consumption form of the value-added tax would also wholly avoid the difficult and arbitrary matter of depreciation allowances—another point of difference with the income-type variant. If it were desired to place a tax on incomes, it would seem more logical and far simpler to utilize the existing income tax mechanism than to collect such a tax through the newly created value-added tax procedures.

Some arguments stressing the merits of th value-added tax over the personal and cor porate income taxes are based on the con sumption-type value-added tax. Potential in ducements to economic growth would be greate with the consumption variant since capita goods are exempt from taxation. This argumen is less valid under the income-and gross prod uct-type value-added taxes. Although the argu ments are less clear-cut between a consumption type value-added tax and the income-type re garding balance of payments effects, the fac that all European countries use the consumptio variant would seemingly lead to pressures fo the U.S. to follow. It also would open up a least the possibility of tax harmonization be tween this country and some of its major trad ing partners. Clara K. Sullivan states:

> Its (the value-added tax) introduction into the federal revenue system of the United States would probably be regarded as a first step toward United States coordination of its tax system with the tax systems of its European trading partners. Although the United States is presumably not planning on membership in the European Economic Community at this juncture, its political and economic situation appears to justify some alignment of its tax system in that direction.[8]

The consumption-type value-added tax woul be advantageous to new and growing firms be cause capital expenditures would be deducte in the year of purchase. The consumption-typ tax also can be expected to avoid the tax penalt which could be particularly severe for the ne and growing firm—enterprises which will hav large capital expenditures. Indeed, such firm could receive a cash refund of taxes paid o purchases of capital goods that exceeded thei tax liability. In such cases, the firm—because i credits on capital goods purchases exceed i value-added tax liabilities on sales—will enjo a net credit. This credit could take one of tw possible forms—an immediate refund or carryover privilege to succeeding accountin periods.

The consumption form of the value-added ta could provide a more stable yield over th business cycle than the income variant. Th consumption variant excludes purchases c capital goods, which are more likely to depa from trend and vary widely from year to yea

If Japanese experience is any guide, however, it may be anticipated that stable or declining firms with existing heavy capital assets and little or no replacement needs would seek some special relief provision under the consumption form of the value-added tax. They are likely to adopt this view because, under the consumption variant, no depreciation or obsolescence costs are permitted as deductions; such costs are bookkeeping entries but are not reflected in any actual market transaction.

Methods of Calculating the Value-Added Tax

The value-added tax can be computed by the subtraction method, the addition method or the tax credit method. Perhaps the simplest procedure is where the firm would compute value-added by subtracting its purchases of goods and services from its gross receipts—the subtraction approach. Under the addition procedure the firm would add up its payments to the factors of production—profits, wages, and rent and interest paid to individuals. Payments made to other firms are excluded to avoid double taxation of value added.

The addition and subtraction procedures yield the same tax base, only if the capital stock is constant. When capital accumulation or decumulation takes place, the subtraction method results in the consumption-type value-added tax and the addition procedure yields the income concept. If, however, in the addition method, depreciation charges are added and gross additions to capital stock and net additions to inventories are subtracted, then the addition method for calculating the tax is converted to the subtraction method.[9]

The third method, the one most frequently used, at least in Europe, is the tax-credit procedure. The firm first would apply the value-added tax rate to its sales and then credit against this amount the tax paid to suppliers of goods and services. A frequently claimed advantage for the tax-credit approach is the requirement that each taxpayer apply the value-added tax to the amount of his sales and show this amount separately on the sales slip. Except in Denmark, however, this is not required for the final sale to the consumer. This itemization is said to make the tax self-enforcing— each taxpayer, to establish his own tax liability, would have to show the amount of the value-added tax on his purchases and would therefore require his suppliers to show explicitly the amount of the tax on their sales to him. Neither the subtraction nor the addition procedure has this built-in mechanism for correcting previous errors. Hence, permanent avoidance of tax payments may be more likely with these methods of calculation. Some resistance to the addition procedure may arise since the tax would appear largely as a levy on the labor component.

If a multiple-rate value-added tax were adopted, the tax-credit approach would have a second advantage, ensuring that the rate imposed on the final product is, in fact, the effective rate.[10] Under the subtraction procedure, the firm must know the applicable rate on each purchase from other enterprises, while this could simply be read off the invoices under the tax-credit procedure. With the addition approach, the tax paid by the final firm plus the tax paid at previous stages would not necessarily be the legal effective rate on the final product; rather, the rate would depend on costs of production at the various stages of the production-distribution process and the tax rates applicable at these stages.

Scope of the Tax

Although virtually all discussions of the value-added tax assume that this levy would apply to all stages of the production-distribution process—manufacturing, wholesaling and retailing—the value-added approach could be applied to only one or two of these stages. To the extent that the value-added tax did not apply to all sectors, however, the tax would become more of a sales tax with the value-added tax technique for exempting producers' goods. Nonetheless, not all European value-added taxes include all three sectors. The proposed tax in Italy contemplates excluding the retail stage—a policy-decision determined largely by administrative considerations. Further, the French value-added tax initially did not include the retail sector, though this practice has since been changed. There is then the possibility—as well as European precedent—for excluding a particular sphere of economic activity.

In line with European experience, although

522-874 O - 73 - 3

not necessarily for identical reasons, it seems likely that if any sector were excluded from the value-added tax in this country it would be the retailer. The one positive argument for excluding the retail sector is that this would lessen the administrative costs of the tax by eliminating many potential filers. Exclusion of this sector, however, also results in a reduced tax base because the value-added by the retailer would be automatically excluded. Indeed, many services would also have to be eliminated from the tax base because it would be impossible to tax them on any basis other than the retail level. To exclude totally the retail sector from the value-added tax would vitiate the twin advantages claimed for the VAT—its comprehensive base and its neutral impact on business. Assuming the retailer exempt but the manufacturer and wholesaler included in the value-added tax, certain distortions could result: a retailer would have an incentive to deal directly with the manufacturer, thereby avoiding the tax at the wholesale stage.

In sum then, it seems distinctly preferable to include all business sectors in the value-added tax. This preserves the neutrality of the tax and maintains the comprehensive base of the levy. No convincing case can be made for excluding the retail sector in toto. At best, the administrative problem of a large number of potential filers might lead to consideration of a policy that exempted or favored small retailers since this would eliminate a large number of potential filers while essentially preserving the tax base. Even here, however, the evidence runs to the contrary. States do not exempt small retailers from the retail sales tax, and no serious compliance problems have surfaced. Thus, it seems distinctly preferable to include all retailers—regardless of size—in the tax base.

The Relation of National Income Accounts to Value-Added Tax Bases

The national income accounts constitute a readily available source of data to estimate the tax base for the three types of value-added taxes. National income accounting utilizes three measures of aggregate economic activity related to the three types of value-added tax.

These national accounts measure the value of a nation's income and product during a particular time period, covering all transactions that take place in the market regardless of the ethical qualities of the transaction. Illegal activities, however, are excluded. The U.S. Department of Commerce explains its procedures with reference to a typical firm:

> On the one hand, such a firm produces and sells a flow of product values. On the other hand, it pays out (or retains) incomes that accrue in the course of its operations. This double aspect of the activities of the single business firm suggests that the measurement of national output can be approached in a two-fold manner, either by summing product values or by summing income flows. It will be seen that the measure of national output in terms of product flows which obtained by pursuing this approach is the gross national product and the corresponding measure in terms of income flows is the national income.[11]

The three accounts relating to the value-added tax are gross national product (the gross product value-added base), national income (the income-type value-added base) and personal consumption expenditures (the consumption value-added base).

To distinguish between gross national product and national income, the former can be considered as current production of goods and services evaluated at market prices and the latter as returns to factors of production. The two largest items that account for the difference between gross national product and national income are capital consumption allowances—that is, depreciation of capital assets—and indirect business taxes, both of which are included in gross national product but excluded from national income. Minor items of difference are: capital outlays charged to current account and accidental damage to fixed business capital; non-tax liabilities, mostly representing charges for government products and services not rendered by government enterprises, including rents and royalties, fines, and penalties; the surplus from government enterprises less subsidies; business transfer payments, chiefly corporate gifts to nonprofit institutions; allowances for consumer bad debts and a balancing item, "statistical discrepancies."

A number of steps are required to move from national income to personal consumption ex-

Table 5—Gross National Product, National Income and Personal Consumption Expenditures, 1970-72

	1970	1971	1971[1] I	II	III	IV	1972[1] I	II	III
Gross National Product	976.4	1050.4	1023.4	1043.0	1056.9	1078.1	1109.1	1139.4	1164.0
Less: Capital Consumption Allowances	86.3	93.8	90.2	92.4	95.0	97.4	99.7	105.3	104.1
Equals: Net National Product	890.1	956.6	933.2	950.6	961.9	980.7	1009.3	1034.1	1059.9
Less: (1) Indirect Business Tax and Nontax Liability	93.4	101.9	99.2	100.3	102.6	105.6	106.7	108.7	111.4
(2) Business Transfer Payments	4.2	4.6	4.5	4.6	4.7	4.7	4.8	4.9	5.0
(3) Statistical Discrepancy	—4.7	—4.8	—3.3	—4.9	—5.9	—5.2	—4.1	—0.1	2.2
Plus: Subsidies Less Current Surplus Government Enterprises	1.5	0.9	1.7	0.8	0.3	0.7	1.2	1.6	1.8
Equals: National Income	798.6	855.7	834.5	851.4	860.8	876.2	903.1	922.1	943.1
Less: (1(Corporate Profits and Inventory Valuation Adjustment	69.9	78.6	76.6	80.1	78.3	79.4	81.8	86.1	89.7
(2) Contribution for Social Insurance	57.7	65.3	64.0	64.8	65.7	66.9	71.9	73.1	74.6
(3) Wage Accruals less Disbursements	0.0	0.6	0.0	0.2	0.6	1.4	—1.4	—0.5	—0.2
Plus: (1) Government Transfer Payments to Persons	75.2	89.0	82.8	90.7	90.3	92.1	94.4	95.7	97.7
(2) Interest Paid by Government (Net) and by Consumers		31.0	31.1	31.0	31.1	30.9	30.9	31.8	31.7
(3) Dividends		24.8	25.4	25.4	25.5	25.2	26.0	26.2	26.5
(4) Business Transfer Payments	4.2	4.6	4.5	4.6	4.7	4.7	4.8	4.9	5.0
Equals: Personal Income	806.3	861.4	838.0	858.1	867.9	881.5	907.0	922.1	939.9
Less: Personal Tax and Nontax Payments	116.7	117.0	112.3	115.2	117.5	123.0	136.5	139.5	141.1
Equals: Disposable Personal Income	689.5	744.4	725.7	742.9	750.4	758.5	770.5	782.6	798.8
(a) Personal Consumption Expenditures	616.8	664.9	648.0	660.4	670.7	680.5	696.1	713.4	728.6

[1]Seasonally adjusted at annual rates.

Source: U.S. Department of Commerce, Social and Economic Statistics Administration, Bureau of Economic Analysis, *Survey of Current Business, various issues.*

penditures. Essentially these steps involve moving from an aggregate total that relates to all income currently earned (national income) to a measure of income actually in the hands of individuals (personal or disposable income) and then finally to a measure of the disposition of income. The major steps involved are subtracting from the national income:

a) corporate profits and inventory valuation adjustment,
b) contributions for social insurance, and
c) wage accruals less disbursements, and adding back in:
a) government transfer payments,
b) interest paid bygovernment (net) and by consumers,

c) dividends, and

d) business transfer payments.

The remainder is personal income. From this personal income measure, personal tax and non-tax payments are deducted to arrive at disposable personal income, the largest item of which is personal consumption expenditures.

The relationships among the three accounts are summarized in Table 5. At present, gross national product is running at a rate of $1,164.0 billion per year, (1972, 3rd quarter, seasonally adjusted at annual rates), national income $943.1 billion per year and personal consumption expenditures at a rate of $728.6 billion per year. These magnitudes, however, represent only rough approximations to the base of a value-added tax. More realistic tax bases must also deal with the problems of imputed values, exemptions and Constitutional restrictions. Further, the value-added tax base will also diverge from the national income magnitudes because certain procedures followed in arriving at these measures of aggregate economic activity are not realistic sources for the application of a tax measure.

Imputations

Since the national income accounts were not drawn up for the formulation of tax policy, or estimation of a tax base, certain items included in these accounts may not be appropriate for the administration of a value-added tax. The prime example of this is the matter of imputations. Although "the basic criterion used for distinguishing an activity is economic production is whether it is reflected in the sales and purchase transactions of the market economy,"[12] the national income accounts also include "certain types of income and product flows which do not take monetary form."[13] Items for which imputations are necessary include:

- wages and salaries paid in kind;
- the rental value of owner-occupied houses;
- food and fuel produced and consumed on farms;
- nonmonetary income and product flows arising in connection with financial intermediaries;
- food provided free to employees of households and nonprofit institutions; and
- the value of free lodging furnished to clergymen, employees of nonprofit hospitals and certain other groups.

As the Department of Commerce states, "The imputations made are the result of concrete considerations and of the traditions of national output measurement. They do not and cannot represent a logically clear-cut exhaustive list, but merely a pragmatic selection among a wide variety of possible imputations."[14] For the present purpose, the important issue regarding imputations is not their underlying rationale or their failure to constitute a clear-cut exhaustive list; the issue is simply that imputed values are not easily reached for the purpose of taxation and hence are likely to pose considerable administrative problems if included in the particular tax base for the value-added tax. Indeed, the National Tax Association Committee on Personal Property Taxation remarked on this point that ". . . imputations sometimes used in economic theory and in national income analysis would be avoided to maintain certainty in the tax base."[15] While these imputations are included in the national income accounts, it would seem quite impractical to include them in the base of the value-added tax.

The Issue of Exemptions.

A second, and perhaps more important. reason for viewing the national income account magnitudes as only first approximations to a particular value-added tax base is that no allowance is made for any exemptions that could be adopted, regardless of the particular value-added tax base that is chosen. To be sure, the granting of exemptions from the gax base reduces one of the most frequently claimed advantages of the value-added tax approach, the comprehensive nature of the tax. Indeed, there is some feeling that exemptions are harder to justify under a value-added tax than the retail sales tax, at least as now used by the State and local sector. It is nonetheless true that exemptions—or at least preferential tax treatment—is accorded certain types of income under the Federal personal income tax, that foreign countries using a value-added tax have provided at least some exemptions (for reasons that may or may not be germane to the United States) and that the value-added tax approach as used in

the State of Michigan from 1953 to 1967 as well as the narrowly defeated value-added tax proposal for the State of West Virginia also provided for certain exemptions.

Thus, while the base of the value-added tax might include all business activities, certain types of business may be exempted because of varying ideas as to what actually constitutes business activity, because of the difficulties involved in defining the tax base for a particular industry or, because of considerations of administrative convenience and taxpayer compliance. To cite some illustrative cases, agriculture, the professional occupations and nonprofit institutions may be exempt because of their peculiar or special type of business activity, financial institutions because of the difficulties in determining their tax base and small business because of considerations of administrative convenience.

Constitutional Restrictions

A third reason for presuming the tax base of any particular type of value-added tax will be less than its national income counterpart is that constitutional restrictions prohibit the taxation of certain types of business transactions. No tax may be applied to exports, under the Federal Constitution; and it is not clear-cut that the courts would uphold a tax on instrumentalities at the State and local governmental level.

Quantitative Estimates of Value-Added Tax Bases

To arrive at more realistic estimates of the value-added tax base, the three national income accounts—gross national product, national income, and personal consumption—were each adjusted to produce a "maximum feasible" tax base. Essentially, the maximum feasible base excludes net exports, includes most imputed values (but not for owner-occupied homes) and provides for a very restricted list of exempt items. More specifically, the following items are excluded from the maximum feasible tax base:

1. *Net Exports of Goods and Services.* Since the value-added tax would not apply to exports but would be levied on imports, only net exports need be deducted to reach the maximum feasible base. In 1971, net exports were $0.7 billion.
2. *Rental Value of Owner-Occupied Homes* (including farms). As rental values of owner-occupied homes are included in the national income accounts, they could, of course, be included in the value-added tax base. Yet because these rental values are imputed, they would post severe administrative problems if so included. Cash rents and purchases of new homes are not imputed values and are kept in the maximum feasible tax base.

   In 1971, rental values of owner-occupied homes totalled $58.6 billion.
3. *Net Foreign Travel Expenditures.* The amounts involved here are relatively small—$5.2 billion in 1971. Such a tax would amount to a national consumption levy by the United States and raise the argument that this country was imposing its tax on spending by U.S. residents abroad.
4. *Religious and Welfare Activities.* Such activities are generally not subject to tax; in 1971, some $9.1 billion was so spent.
5. *Government Purchases of Goods and Services.* Purchases by Federal, State and local governments totalled $232.8 billion in 1971. Of this, $97.8 billion represented purchases of goods and services by the Federal sector.

The amount spent by the Federal government is excluded to provide an estimate of the revenue that would actually be produced by the particular VAT levy. If it were included, prices of such purchases presumably would go up and hence the Federal tax would, in effect, be paid to the Federal Government but not produce additional Federal revenue.

Purchases of goods and services by State and local governments represented some $135.0 billion in 1971. This amount is excluded because taxing such governmental purchases is inconsistent with the Federal policy of aid to State and local jurisdictions and because it might raise the Constitutional question of reciprocal immunities.

These exemptions are judgmental; such items could be included in particular value-added tax bases. Nonetheless, they are excluded in the belief that this provides a more realistic approximation of what a "very tough" value-added tax could produce in terms of revenue.

Table 6—Alternative Value-Added Tax Bases, 1971 and 1972 (est.)

Item	Percent of 1971 G.N.P.	1971 $ Billions	1972 (Est.) $ Billions
1. Gross national product	100.0	1050.4	$1,150.0
2. —less net exports of goods and services	0.1	—0.7	-1.2
3. —less rental value of homes (including farms) less goods and services purchased for home operation & maintenance	5.6	—58.6	—64.4
4. —less foreign travel expenditures (net of expenditures in U.S. by foreigners)	0.5	—5.2	—5.8
5. —less religious and welfare activities	0.9	—9.1	—10.4
6. —less government purchases of goods and services	22.2	—232.8	—255.3
7. Maximum feasible gross product value-added tax base	70.8	744.0	812.9
8. —less business transfer payments	0.4	—4.6	—4.6
9. +plus subsidies less current surplus of government enterprises	0.1	—0.9	—1.2
10. —less capital consumption allowances (nonresidential)[1]	8.0	—83.6	—92.0
11. Statistical discrepancy	0.5	—4.8	—5.6
12. Maximum feasible income type value-added tax base[2]	62.1	651.9	709.5
13. Total consumer expenditures in G.N.P.	63.3	644.8	728.0
14. —less rental value of owner-occupied homes	63.3	664.8	728.0
(including farms) less goods & services purchased for home operation and maintenance	5.6	—58.6	—64.4
15. —less foreign travel expenditures (net of expenditures in U.S. by foreigners)	0.5	—5.2	—5.8
16. —less religious & welfare activities	0.9	—9.1	—10.4
17. Broad consumer expenditure component of VAT base outlays on construction of owner-occupied housing	2.8	+29.0	+32.2
18. Monetary interest paid by individuals	1.8	+19.0	+20.7
19. Maximum feasible consumption-type VAT tax base	59.7	627.0	700.3

Possible Base Subtractions	1971 Billions	1972[3]	Percent of 1971 Maximum Feasible VAT: Gross Product Type	Income Type	Consumption Type
20. Housing	57.0	62.7	7.7	8.7	9.1
21. Purchased food (excluding tobacco & on-premise consumption)	103.1	113.3	13.9	15.8	16.4
22. Medical care	44.2	48.4	5.9	6.8	7.0
23. Drugs and sundries	7.2	7.9	1.0	1.1	1.1
24. Imputed financial bank services	14.4	15.7	1.9	2.2	2.3
25. Government-owned utilities	13.2	14.5	1.8	2.0	2.1
26. Newspapers & magazines	4.5	4.9	0.6	0.7	0.7
27. Legal services	4.6	4.9	0.6	0.7	0.7
28. Handling cost of life insurance	8.6	9.6	1.2	1.3	1.4
29. Parimutual receipts	1.0	1.2	0.1	0.2	0.2
30. Private research	2.6	2.7	0.3	0.4	0.4
31. Education	8.5	9.3	1.1	1.3	1.4
32. Food furnished employees	2.5	2.7	0.3	0.4	0.4
33. Domestic service	5.0	5.7	0.7	0.8	0.8
34. Interest paid by individuals	19.0	20.9	2.6	2.9	3.0
35. Total Possible Exclusions	295.4	324.4	39.7	45.3	47.1
36. Minimum VAT-type base, 1971			448.6	356.5	331.6
37. Minimum VAT-type base, 1972			488.5	385.1	375.9

[1]Rental values of owner-occupied homes are excluded, therefore depreciation on these structures was excluded from the capital consumption allowance.
[2]Indirect business taxes are included in the maximum feasible income type base.
[3]1972 dollar amounts were calculated by applying 1971 percentage figures for each type of value-added tax and for each specific item (lines 20 through 34) to 1972 maximum feasible tax bases and then taking the simple average of the three amounts.

Source: U.S. Department of Commerce, Social and Economic Statistics Administration, Bureau of Economic Analysis, *Survey of Current Business*, July, 1972.

To state this point in another way, the maximum feasible base idea attempts to provide estimates of revenue potential for the value-added levies before the questions relating to the case for and against specific exemptions are dealt with.

Estimated Tax Yields

Using the maximum feasible bases for 1971, every one percentage point in rate of a very tough gross-produce value-added tax would have yielded some $7.5 billion; a very tough income-type value-added tax would have yielded some $6.5 billion and a consumption-type value-added tax would have yielded some $6.3 billion. (*See Table 6.*) To bring these magnitudes up to date, a 1972 gross national product of $1.15 trillion was assumed and the 1971 percentage of each adjustment was then applied. The maximum feasible value-added tax bases would yield $8.1 billion, $7.1 billion and $7.0 billion respectively for each percentage point of rate under the gross product, income and consumption types of value-added tax base in 1972.

The maximum feasible tax bases contain several specific items that may, for one reason or another, be exempted from the tax. Lines 20 through 34 in Table 6 itemize several specific candidates; the sum of these items in 1971 was $295.4 billion. Thus, if all these items were excluded from the 1971 tax base, the value-added tax would yield approximately $4.5 billion, $3.6 billion and $3.3 billion per percentage point of rate under the gross product, income and consumption types of value-added tax. The sum

of the possible specific exempt items is $324.4 billion in 1972; excluding this total amount, the revenue yield per percentage point of rate turns out to be $4.9 billion for the gross product type of value-added tax base; $3.9 billion for the income type and $3.8 billion for the consumption type.

These figures represent minimum yield estimates. To exempt all activities itemized in lines 20 through 34 is, of course, possible. To do so, however, means that some 40 to 47 percent of the hypothetical tax base would be deemed inappropriate for tax purposes. Going this far on the exemption route would seemingly destroy the main advantages claimed by value-added tax proponents—its productivity and comprehensive nature. Moreover, it would take a tax that is neutral concerning within-industry organization and transform it into a tax that is unneutral among industries. Indeed, it would be tantamount to instituting a series of selective excise taxes—taxes that actively distort consumption choices. To proceed this far on the exemption front would warrant re-examination of the value-added tax *per se* as an instrument of Federal tax policy.

An analysis of a Federal sales tax by Douglas H. Eldridge in 1962 reached generally similar conclusions. Eldridge concluded his study:

> This list of probable exclusions reflects no more compassion for the taxpayer, and particularly the low income level taxpayer, than is usually evinced by the tax committees of the Congress. This tentative list indicates exclusion of about $215 billion from the total of $355.4 billion personal consumption expenditures in reaching a Federal sales tax base of about 40 percent of total consumption, or $140 billion at 1962 levels.
>
> . . . A tax base of 40 percent of consumer expenditures would fall far short of some economists' ideal of a general and neutral tax system . . . If the regressive character of the sales tax were to be overlooked and food, all utilities, medical care, death expenses, and some other items were included in the base, the coverage could be run up to perhaps 70 percent of consumer expenditures, but would still be incomplete. Whether, on the other hand, the exclusions tentatively suggested would make the system conform to other economists' ideal of a proportional or progressive tax system would be difficult to say. In any case, the endeavor to design a base of final consumption items would involve serious but apparently not insurmountable problems for legislative draftsmen, administrators, and taxpayers in the distinguishing of taxable and nontaxable transactions.[16]

Charles E. McLure, Jr., also reaches this general conclusion—that the actual base of a consumption-type value-added tax would be far less comprehensive than that of the pure or ideal tax.

> . . . It is virtually certain that an American VAT would contain important exemptions. For one thing, it is very difficult to tax housing and the output of financial institutions under the VAT. If only these and several other difficult-to-tax items were exempted, the tax base would fall to about 80 percent of personal consumption expenditures. Moreover, several items of expenditures might be thought worthy of exemptions as a matter of social policy. Examples are medicine and medical expenses, public education and research expenditures, and religious and welfare activities. Exemptions of this type might reduce the tax base further, to only about two-thirds of personal consumption expenditures. Finally, such things as household utilities and food for home preparation might be exempted in order to lessen the regressivity of the tax. If so, the tax base would fall to less than one-half of personal consumption expenditures.[17]

FOOTNOTES

[1]See Carl S. Shoup, "Theory and Background of the Value-Added
ference of the National Tax Association, Detroit, Michigan, 1955, pp. 6-19.

[2]See, for example, William H. Oakland, "A National Value-Added Tax" in *The Value-Added Tax, A Preliminary Analysis*, Taxation With Representation, Arlington, Virginia.

[3]Report of the Committee on Personal Property Taxation on Possible Substitutes for Ad Valorem Taxation of tangible Personal Property Used in Business, *Proceedings of the Forty-Sixth Annual Conference on Taxation of the National Tax Association, 1953*, Sacramento, California, 1954, p. 390.

[4]Richard A. Musgrave and Peggy Brewer Richman, "Allocation Aspects, Domestic and International" in *The Role of Direct and Indirect Taxes in the Federal Revenue System*, A Conference Report of the National Bureau of Economic Research and the Brookings Institution, Princeton University Press, Princeton, New Jersey, 1964, p. 90.

[5]Ann F. Friedlander, "Incidence and Price Effects of Value-Added Tax," *Proceedings of the 64th Annual Conference of the National Tax Association*, Kansas City, Missouri, 1971, p. 273.

[6]*Ibid.* p. 275.

[7]John F. Due, "The Value-Added Tax," *Western Economic Journal*, Spring 1965, p. 170.

[8]Clara K. Sullivan, "Statement on the Value-Added Tax Proposal Under Consideration by the White House Staff," in *The Value-Added Tax, A Preliminary Analysis*, Taxation With Representation, Arlington, Virginia.

[9]Shoup, *op. cit.*, p. 11.

[10]Clara K. Sullivan's statement on the Value-Added Tax Proposal Under Consideration by the White House Staff in *The Value Added Tax, A Preliminary Analysis*, Taxation With Representation, Arlington, Virginia.

[11]U.S. Department of Commerce, *National Income*, 1954 Edition, p. 30.

[12]*Ibid.*, p. 30.

[13]*Ibid.*, p. 45.

[14]*Ibid.*, p. 45.

[15]*Op. cit.*, p. 390.

[16]Douglas H. Eldreidge, "Equity, Administration and Compliance, and Intergovernmental Fiscal Aspects," *The Role of Direct and Indirect Taxes in the Federal Revenue System*, A Conference Report of the National Bureau of Economic Research and the Brookings Institution, Princeton University Press, Princeton, New Jersey, 1964, pp. 171-172.

[17]Charles E. McLure, Jr., "The Tax on Value Added: Pros and Cons," *Value Added Tax: Two Views*, American Enterprise Institute for Public Policy Research, 1972, p. 3.

Chapter III

AREAS OF PREFERRED TAX TREATMENT UNDER THE VALUE-ADDED TAX

The Question of Preferred Tax Treatment

The preferred form of the value-added tax is a comprehensive, single-rate tax. Enactment of a VAT of this nature, however, does not seem realistic. To be sure there is much to be said for the comprehensive single-rate approach—particularly in the case of the value-added tax, championed as the most "neutral" of the broad-based levies. Deviation from the comprehensive VAT form by the use of preferential tax treatment devices vitiates the neutrality of the tax, erodes the comprehensive nature of the base and thus requires higher tax rates to yield equivalent amounts of revenue. When considering enactment of a new tax measure such as VAT, low tax rates are especially preferable for strategic reasons because they help to avoid or to minimize any incentive for tax evasion or compliance problems.

All the above then argues for a "tough" tax base—one that keeps items receiving preferential tax treatment to a minimum. At least four reasons, however, can be offered for providing such preferred tax treatment. With regard to consumption-based levies, a paramount concern is the issue of regressivity of the tax. Preferential tax treatment is also granted on the more vague basis of general social policy—the impropriety of taxing either goods or services that are generally regarded as inappropriate sources of taxation such as doctors' fees. More specifically related to the value-added tax are administrative considerations. Since the tax, if broad-based, will require a large number of returns, many from firms or activities with negligible value-added, it may be more feasible to exclude small firms to cut down administrative and tax-compliance problems. Preferred tax treatment may also result because the value-added tax is difficult to apply to particular sectors—the financial institutions in particular.

The case for exemption or preferential tax treatment must be counterposed with the following considerations:

- Each instance of preferential tax treatment makes it progressively more difficult to "hold-the-line" against other candidates; at worst, a snowballing effect can set in, resulting in a substantial erosion of the potential tax base.
- To the extent that preferred tax status is conferred, the most attractive attributes of the value-added tax—its productivity and neutrality—are eroded.
- With exemptions or preferential tax treatment granted to certain items, the reduced tax base requires application of higher rates to raise equivalent tax yields; such higher rates, however, applied to the narrower base are bound to increasingly distort consumer preferences and to increase the inducement to tax evasion and avoidance.
- The use of exemptions greatly complicates administration of the value-added tax. If a firm sells both taxable and exempt goods, sales by the firm must be separated; if a firm produces both taxable and exempt goods, purchases of goods and services must also be separated since the portion of such purchases used in the production of exempt goods is not eligible for the tax credit. Thus, the self-enforcing feature of the value-added tax is weakened by the use of exemptions, while taxpayer compliance costs and possibilities for tax evasion are increased.

The Regressivity Issue

A long standing criticism of the retail sales tax is that it taxes certain "necessities"—food, clothing, shelter and medical care. This makes the sales tax a particular burden for the poor because those with low incomes tend to spend proportionately more for such commodities than those with higher incomes. Thus, the sales tax is considered regressive because it takes proportionately more from the incomes of the less wealthy and less from those with greater ability to pay. The same criticism and the same reasoning is applied to the value-added tax. Indeed, the alleged regressivity of the value-added tax is a major point of attack leveled by its opponents.

Empirical Evidence and Studies

An early, but still applicable, study by the Bureau of Labor Statistics breaks down 23 items of current consumption by income class (after taxes). Hence, it is possible to trace expenditure patterns for these items through various levels of income. If an item decreases

as a proportion of consumer expenditures as incomes rise, then taxing such items results in a regressive tax burden. On the other hand, taxing items that increase in importance as incomes rise adds to the progressivity of the tax.

Items that add sharply to the regressivity of a consumer levy are: (1) food prepared at home, which constitutes 26.1 percent of current consumption expenditures for those in the $1,000 to $1,999 income bracket but only 13.0 percent for those with money incomes of $15,000 and over; (2) rented dwelling costs, which fall from 11.5 percent for those in the $1,000 to $1,999 income bracket to 1.7 percent for those with $15,000 or more income; (3) fuel, light, refrigeration and water costs associated with housing, where the applicable figures are 9.2 percent for those earning under $1,000 and 3.4 percent for those earning $15,000 or more; (4) medical care, where those earning $1,000 or less spent 10.2 percent of their incomes and those earning $15,000 or more spent but 6.2 percent. For all consuming units included in the survey, these four items amounted to 36.5 percent of current consumption expenditures. *(See Table 7.)* More than half of this total was

Table 7—Percent Distribution of Family Expenditures, by Income Class, All Urban and Rural Families and Single Consumers, United States, 1960-1961

Family Characteristics, Income and Expenditures	Total	Money Income After Taxes									
		Under $1,000	$1,000 to $1,999	$2,000 to $2,999	$3,000 to $3,999	$4,000 to $4,999	$5,000 to $5,999	$6,000 to $7,499	$7,500 to $9,999	$10,000 to $14,999	$15,000 and over
Percent distribution:											
Expenditures for current consumption	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Food, total	24.5	29.0	29.9	28.2	26.2	25.4	25.0	24.2	23.8	22.1	19.1
Food prepared at home	19.6	24.2	26.1	23.5	21.5	20.8	20.8	19.6	18.6	16.4	13.0
Food away from home	4.9	4.8	3.8	4.7	4.7	4.6	4.1	4.6	5.2	5.7	6.1
Tobacco	1.8	1.7	2.0	2.2	2.2	2.1	2.0	1.9	1.7	1.3	1.0
Alcoholic beverages	1.5	.5	1.0	1.1	1.3	1.5	1.5	1.6	1.6	1.8	1.8
Housing, total	28.9	36.2	35.1	31.7	30.0	28.7	29.1	28.7	27.5	27.1	29.6
Shelter	13.0	17.6	17.1	15.3	13.9	13.1	13.2	12.9	12.2	11.6	12.5
Rented dwelling	5.3	10.3	11.5	9.7	8.7	7.6	6.1	4.1	3.4	2.4	1.7
Owned dwelling	7.0	6.7	5.3	5.3	4.8	5.1	6.6	8.1	8.0	8.1	8.8
Other shelter	.7	.6	.3	.3	.4	.4	.5	.7	.7	1.1	2.0
Fuel, light, refrigeration, water	4.9	9.2	8.1	6.5	5.5	5.1	5.1	4.8	4.4	4.0	3.4
Household operations	5.7	5.6	5.9	5.5	5.6	5.4	5.4	5.5	5.5	6.0	8.3
Housefurnishings and equipment	5.3	3.8	4.0	4.4	4.9	5.1	5.5	5.5	5.5	5.5	5.4
Clothing, clothing materials, services	10.3	6.2	6.7	8.3	9.0	9.5	9.8	10.5	11.2	11.9	12.3
Personal care	2.9	2.5	2.9	3.2	3.1	2.9	3.0	2.9	2.9	2.7	2.4
Medical care	6.7	10.2	8.8	8.2	7.3	6.6	6.6	6.5	6.3	6.3	6.2
Recreation	4.0	2.1	2.1	2.7	3.3	3.6	3.7	4.1	4.4	4.9	4.7
Reading	.9	.9	.9	.9	.9	.8	.9	.9	.9	.9	.9
Education	1.0	1.1	.3	.4	.6	.6	.8	1.0	1.1	1.9	2.8
Transportation	15.3	6.7	7.8	11.0	14.3	16.4	16.0	15.8	16.5	16.5	14.4
Automobile	13.7	5.3	6.3	9.4	12.8	15.0	14.8	14.6	15.1	14.6	11.2
Other travel and transportation	1.5	1.4	1.5	1.6	1.5	1.4	1.1	1.2	1.4	1.9	3.2
Other expenditures	2.2	2.9	2.5	2.1	1.8	1.8	1.7	2.0	2.1	2.5	4.9
Total	100.0	100.0	100.0	100.0	100.0	99.9	100.1	100.1	100.0	99.9	100.1

Source: BLS Bulletin, 1964

Table 8—Burden Impact of Raising $25 Billion in Alternative Ways (Tax as Percent of AGI)

Adjusted Gross Income	Income Tax[1] I	Value-Added Tax, 5%[2] II	Value-Added Tax, 6% with credit[3] III
2,000	—	5.0	—
4,300	—	4.5	2.7
5,000	0.49	4.4	2.9
10,000	2.26	4.0	4.8
15,000	3.03	3.7	4.4
50,000	5.96	2.5	3.0
100,000	8.63	2.0	2.4

[1]Joint returns, four exceptions. Above $15,000 assumes 10% as deduction. All income fully taxable. Assuming the yield from present rates at $100 billion, the above equals one quarter of present liabilities to yield $25 billion.
[2]Ratios estimated with reference to *Tax Burden and Benefit of Government Expenditures by Income Classes 1961 to 1965,* Tax Foundation, 1967. These estimates, especially for higher incomes, should be taken as illustrative.
[3]$2,000 of consumption is tax-free. Credit of $100 to vanish by $20 for each $1,000 of income in excess of $5,000.

Source: Richard A. Musgrave, "Appraisal of Value-Added Tax", Testimony presented to the Joint Economic Committee, Hearings on Value-Added Tax, March 23, 1972.

attributable to food prepared at home (19.6 percent); the remainder was spread rather evenly —rental dwelling costs (5.3 percent), fuel, light, refrigeration and water costs (4.9 percent) and costs of medical care (6.7 percent).

Professor Richard Musgrave testified before the Joint Economic Committee on the regressivity of a straight value-added tax and the use of a vanishing-credit device to reduce this regressivity. For his analysis, Musgrave assumed it was necessary to raise an additional $25 billion in Federal taxes. He compared the proportion of taxes paid to income, at varying levels of income, under (a) the income tax, (b) a value-added tax of 5 percent and (c) a value-added tax of 6 percent with provision for a vanishing credit. *(See Table 8.)*

This analysis shows clearly that the value-added tax, lacking a credit device, is regressive. Those with $2,000 of adjusted gross income would pay about 5 percent of their income under a 5 percent VAT with no credit; those at $10,000 would pay 4 percent; those at $100,000 only 2 percent. Indeed, without a credit provision, the percentage of AGI paid in value-added tax declines throughout the income range.

Professor Musgrave also assumed a vanishing-credit device would be employed to modify this burden distribution.

Under his assumptions, the first $2,000 of consumption would be tax free, with a credit of $100 to diminish at the rate of $20 for each $1,000 of income in excess of $5,000. Thus, the credit would disappear at the $10,000 income level. This type of credit costs $5 billion and requires an increase to 6 percent in the VAT rate to raise the initial $25 billion. This type of credit makes the burden of the tax progressive up to the $10,000 level of adjusted gross income —a level which includes about 70 percent of the taxpayers—but remains regressive beyond $10,000, where the credit is cut off. Nonetheless, compared with the income tax burden, the VAT with a credit imposes a heavier tax for those up to the $15,000 adjusted gross income level which includes the range of incomes over which the credit device makes the value-added tax progressive.

A more generous credit could, of course, reduce the difference between the burdens of the income tax and the value-added tax, but it would require higher tax rates to yield equivalent revenues. The regressivity of the tax nonetheless remains, though it, too, can be narrowed down to fewer taxpayers by phasing the credit out at higher income levels. Again, this involves increasing the rate to yield the initial $25 billion.

The Exemption Approach

Criticism of the retail sales tax as regressive led the States to exempt from their levies at

Table 9—Exemption of Food and Medicine in State General Sales Taxes, January 1, 1972

State	Tax Rate (percent)	Food[1]	Medicine[2]
Alabama	4	..	x[3]
Arizona	3	..	x
California	4	x	x
Colorado*	3	..	x
Connecticut	5	x	x
Dist. of Columbia*	4	x[4]	x
Florida	4	x	x
Idaho	3	..	x
Indiana*	2	..	x
Kentucky	5	x	x
Louisiana	3	x[5]	x[5]
Maine	5	x	x
Maryland	4	x	x
Massachusetts	3	x	x
Michigan	4	..	x[6]
Minnesota	3	x	x
Nebraska*	2	..	x
Nevada	2	..	x
New Jersey	3	x	x
New York	3	x	x
North Carolina	3	..	x
North Dakota	4	x[7]	x
Ohio	4	x	x
Pennsylvania	6	x	x
Rhode Island	5	x	x
Texas	3	x	x
Vermont	3	x	x
Virginia	3	..	x
West Virginia	3	..	x
Wisconsin	4	x	x

Note: In South Carolina effective March 31, 1970 persons aged 65 or older may apply to the Tax Commission for reimbursement of sales tax paid for prescription medicine.

*Also allows personal income tax credit or cash rebate for sales tax paid on food.

[1]Food exemptions usually apply to "food for human consumption off the premises where sold." Restaurant meals are taxable in all States, although meals costing less than a specified amount are exempt in some States.
[2]The exemption is usually applicable to medicine sold on prescription or compounded by druggists, and often to medical and dental aids or devices such as artificial limbs, eyeglasses, and dentures. Some States exempt patent medicines and household remedies.
[3]Limited to medicines prescribed by a physician for persons aged 65 or older.
[4]Rate on food is 2 percent.
[5]The rate on food and prescription medicine is 2 percent.
[6]The exemption is applicable only to 50 percent of the amount charged for recorded drug prescriptions. Full exemption applies to artificial limbs and eyes.
[7]Limited to milk and milk products and fresh and cured meats, including poultry and fish and other fresh and salt-water animal products, when purchased by consumers for consumption off the premises. The exemption does not apply, however, to such products if preserved by enclosure in an airtight container.

least some items considered necessities. As of January 1, 1972, for example, food consumed at home was tax exempt in 16 States, taxable but at preferentially low rates in the District of Columbia and Louisiana and limited to certain food commodities in North Dakota. *(See Table 9.)* Medicine, (usually prescription drugs and frequently medical or dental devices) is tax-exempt in 26 States; taxable at reduced rates in Louisiana; subject to special treatment in Alabama and South Carolina (for those 65 and over); 50 percent of the amount charged for recorded drug prescriptions is exempt in Michigan.

Preferential tax treatment for necessities then is a deeply rooted facet of State retail sales taxes, both those adopted long ago and those recently enacted. Of the 11 State sales taxes adopted since 1960, six exempted food, all 11 exempted prescription drugs and three (Minnesota, New York and Wisconsin) exempted all drugs and medicines. Of the more recently adopted sales levies, four exempt clothing (the first $175 in value in Massachusetts and the full amount in Minnesota, New Jersey and Wisconsin). Of the sales taxes adopted prior to 1960, only Pennsylvania exempted clothing.

The Credit-Rebate Approach

Credit-rebate programs also can reduce the impact of a consumer-type levy on the low-income population. The operation of these programs is relatively simple.

A flat per capita amount or an amount that declines as income increases is deducted from the taxpayer's income tax liability. If the income tax liability is zero or less than the amount the individual can claim as a credit, he receives a cash rebate. The dollar value of "tax-free" purchases that can be made by the credit is determined by dividing the amount of the credit by the sales tax rate; if the rate is 4 percent and the amount of the credit is $8, the individual is effectively exempted from paying sales tax on $200 of purchases.

Such programs are presently in effect in Indiana (1963), Colorado (1965), Hawaii (1965), Idaho (1965 and 1969),* Massachusetts (1966), Nebraska (1967), Vermont (1969) and Washington, D.C. (1969). *(See Table 10.)*

*The Idaho rebate is available only to those 65 and over.

Credits vs. Exemptions

One advantage of the credit scheme is that it eliminates the need to make decisions on what constitutes a necessity. In the above example, the first $200 of purchases is tax exempt, and such purchases may be for food, medicine, clothing, etc. This feature therefore eliminates the problem inherent in a policy of specific exemptions, which gives preferential treatment to those consumers who spend more on tax-exempt commodities. By way of contrast, the credit program is neutral with regard to consumer tastes.

More significant, however, is the fact that under an exemption policy for food, all food is tax exempt. Since the more affluent tend to consume more expensive grades or cuts of food, the dollar value of the food exemption tends to increase as incomes rise. Under the flat per capita credit, the value of tax-exempt purchases remains constant as income increases. If the objective is to reduce the tax paid by the poor, there is little reason to exempt—or for that matter to allow credits—to the wealthy. Under a diminishing credit, the value of tax-exempt purchases declines as income increases and under a vanishing-credit it is scaled down to zero at some income level. The vanishing-credit therefore provides tax relief at lesser cost to the governmental jurisdiction.

Another disadvantage to exempting food stems from the fact that stores usually sell food as well as other items. If food is granted an outright exemption, the vendor must separate food sales from the sale of other items in calculating his tax liability. This, of course, is not impossible, but it does add to taxpayer compliance problems. The credit-rebate approach, on the other hand, avoids this administrative difficulty. Exemption of food also leads to questions of interpretation—whether items such as vitamin pills are, for example, food. For these reasons, then, the credit approach seems preferable to outright exemption of food.

The credit approach to relieving the alleged regressivity of the value-added tax departs from European practice. The Europeans deal with the regressivity issue by using the VAT revenues to finance programs largely aimed at the lower-income people. To be sure, departing from the European practice is not a

Table 10—State Use of a Personal Income Tax Credit-Rebate to Minimize or Offset the Regressivity of Sales and Property Taxes[1]

State	Type of Credit	Year Adopted	Amount of Credit	Law	Administrative Procedure
Colorado	For sales tax paid on food	1965	$7 per personal exemption (exclusive of age and blindness)	Chap. 138, Art. 1 (Secs. 138-1-18 & 138-1-19 added by H.B. 1119, Laws 1965, effective 6/1/65)	Credit to be claimed on income tax returns. For resident individuals without taxable income a refund will be granted on such forms or returns for refund as prescribed by the Director of Revenue.
	For senior citizen property tax relief (homeowners and renters)	1971	Varies with income up to $3700; limited to 50 percent of property tax or $200	Chap. 138, Art. 1 (Secs. 138-1-20 & 138-1-21 added by H.B. 1040, Laws 1971, effective 7/1/71)	Credit claimed on income tax returns or, for those having no taxable income, on forms prescribed by the Department of Revenue.
Hawaii	For consumer-type taxes	1965	Varies based on income[2]	Chap. 121 (Secs. 121-12-1 & 121-12-2 added by Act 155, Laws 1965)	The Director of Taxation shall prepare and prescribe the appropriate form or forms to be used by taxpayers in filing claims for tax credits. The form shall be made an integral part of the individual net income tax return. In the event the tax credits exceed the amount of the income tax payments due, the excess of credits over payments due shall be refunded to the taxpayer.
	For drug or medical expenses	1970	do	Act 180, Laws 1970; sec. 235-56	
	For household rent	1970	do	Act 180, Laws 1970	
Idaho	For sales taxes paid	1965 and 1969	$10 credit per personal exemption (rebate applicable to taxpayers 65 and over only)	Chap. 195, Laws 1965. Chap 456, Laws 1969, Sec. 63-3024(d)	Credit (or rebate if credit exceeds tax liability) to be claimed on income tax returns. For resident individuals (65 and over) without taxable income a refund will be granted on such forms or returns for refund as prescribed by the State Tax Commission.
Indiana	For sales tax paid on food	1963	$8 per personal exemption (exclusive of age and blindness)	Chap. 50 (Chap. 30, Sec. 6d added by H.B. 1226, Laws 1963, 1st sp. sess., effective 4/20/63)	Credit to be claimed on income tax returns. If an individual is not otherwise required to file a return, he may obtain a refund by filing a return, completing such return insofar as may be applicable, and claiming such refund.
Kansas	For senior citizen homestead relief	1970	Varies, based on income and amount of property tax	Chap. 403 (H.B. 1253, Laws 1970)	Tax credit (or rebate if credit exceeds tax liability). The Department of Revenue shall make available suitable forms with instructions for claimants including a form which may be included with or a part of the individual income tax blank.

522-874 O - 73 - 4

Table 10—State Use of a Personal Income Tax Credit-Rebate to Minimize or Offset the Regressivity of Sales and Property Taxes[1]

State	Type of Credit	Year Adopted	Amount of Credit	Law	Administrative Procedure
Massachusetts . . .	For consumer-type taxes	1966	$4 for taxpayer, $4 for spouse, if any, and $8 for each qualified dependent[4]	Chap. 62 (Sec. 6b added by ch. 14, Acts 1966)	Same as Indiana.
Minnesota	For senior citizen homestead relief[5]	1967	Varies with income from 75% to 10% of net property tax or equivalent rent not to exceed $800 (Max. credit $450)	Chap. 290 (Secs. 290.0601 to 290.0617 added by Ch. 32, Art. VI, Laws 1967, effective 1/1/68)	Tax credit or refund to be claimed on income tax return. Department of Taxation shall make available a separate schedule for information necessary to administration of this section and the schedule shall be attached and filed with the income tax return. Cash refund granted if property tax credit exceeds State personal income tax liability.
	Tax relief for renters	1967	7.5% of the total amount paid by claimant as rent, not to exceed $90[6]	Chap. 290 (Secs. 290.981 to 290.992 added by Ch. 32, Art. XVII, Laws 1967, effective 1/1/68)	Same as above.
Nebraska	For sales tax paid on food	1967	$7 per personal exemption (exclusive of age and blindness)	H.B. 377, Laws 1967	Credit to be claimed on income tax returns. Refund will be allowed to the extent that credit exceeds income tax payable but no refund will be made for less than $2.
Vermont	For sales tax paid	1969	Varies, based on income and number of personal exemptions (other than age and blindness)[7]	H.B. 125, Laws 1969; Chap. 152, Sec. 5829	Credit to be claimed on income tax returns. Credits properly claimed by resident individuals who have no income or no income subject to Vermont tax will be allowed the full amount of the credit as a refund.
	For senior citizen property tax relief	1969	Equal to the amount by which property taxes or rent constituting property taxes on their households exceeds 7% of the individuals total household income multiplied by the local rate factor[8]	H.B. 222, Laws 1969; Chap. 139, Sec. 5901	The credit may not exceed the property tax, but if income tax liability is less than the credit the difference between the liability and the credit will be refunded.

Table 10—State Use of a Personal Income Tax Credit-Rebate to Minimize or Offset the Regressivity of Sales and Property Taxes[1]

State	Type of Credit	Year Adopted	Amount of Credit	Law	Administrative Procedure
Wisconsin	For senior citizen homestead tax relief	1963	Varies, based on income and amount of property tax or rental payment	Chap. 71 (Sec. 71.09 (7) added by Ch. 566 (A.B. 301) eff. 6/10/64. Ch. 580 (A.B. 907) repealed & recreated Sec. 71.09(7) effective Dec. 19, 1964.)	Tax credit or refund to be claimed on income tax return. The Department of Taxation shall make available a separate schedule which shall call for the information necessary to administering this section and such schedule shall be attached to and filed with the Wisconsin income tax form. Cash refund granted if property tax credit exceeds State personal income tax due.
Washington, D.C...	For sales tax paid on food	1969	Varied, based on income[9] (credit applicable to low income taxpayers only)	P.L. 91-106 (H.R. 12982)	Tax credit or refund to be claimed on income tax return.

[1]If a taxpayer has no State personal income tax liability or a tax liability insufficient to absorb the entire credit (a negative tax credit situation) he is entitled to the appropriate cash refund. If the taxpayer's State personal liability is equal to or greater than the tax credit, his personal income tax liability is reduced by the amount of the credit (a positive tax credit situation).

[2]The credits for consumer-type taxes are based on "modified adjusted gross income" (regular taxable income plus exempt income such as social security benefits, life insurance proceeds, etc. and range from $21 per qualified exemption for taxpayers having a modified adjusted income of less than $1,000 to $1 per exemption where such income is between $8,000 and $9,999.

[3]Ranges from $12 per qualified exemption for taxpayers having taxable income under $1,000 to $0 where such income is over $7,000.

[4]Credits are only allowed if total taxable income of taxpayer and spouse, if any, does not exceed $5,000 for the taxable year.

[5]All homeowners residing in their own homes are allowed a direct reduction of their property taxes due by means of the Homestead Property Tax Credit. This credit amounts to 35 percent of the tax levy, excluding the amount levied for bonded indebtedness, to a maximum credit of $250. Senior citizen homeowners also receive this credit. Local governments are reimbursed for their tax loss from the state property tax relief fund.

[6]Elderly may choose this relief or senior citizen relief but not both.

[7]Ranges from $12 to $81 for taxpayers having less than $1,000 total household income to $0 to $36 for those having between $6,000 and $6,999 income, based on number of personal exemptions.

[8]The commissioner shall annually prepare and make available the local rate factors by arraying all municipalities according to their effective tax rate and dividing the population of the State into quintiles from such array with those having the lowest effective tax rates being in the first quintile. The local rate factors shall be as follows: first quintile, 0.6; second quintile, 0.8; third quintile, 1.0; fourth quintile, 1.2; fifth quintile, 1.4. The amount of property taxes or rent constituting property taxes used in computing the credit are limited to $300 per taxable year.

[9]Low income taxpayers (AGI not over $6,000) are allowed a credit ranging from $2 to $6 per personal exemption, depending upon the taxpayer's income bracket.

Source: ACIR, *State and Local Finances: Significant Features and Suggested Legislation, 1972 Edition* (M-74, 1972).

decisive issue. More important is that use of the credit adds to the administrative costs of the tax and requires a higher rate to yield equivalent revenues than would a no-credit value-added tax. The reason for the credit approach, of course, is to introduce less regressivity or more progressivity into the revenue source and, therefore, the total revenue expenditure package.

Implementing the Credit

The problems involved in providing a credit center around those individuals for whom a cash rebate would be required; at least this has been the experience of some States in administering their property tax and sales tax relief programs. Those subject to the income tax would simply take the refund as a credit against their income tax liabilities. A credit of the vanishing type would not pose any additional problems.

If the direct refund to those whose credit for VAT purchases exceeded their income tax liabilities were to pose a serious problem for non-filers of income tax returns, then the very intent of the program would, of course, be defeated.

Less serious problems with the credit-rebate approach also have surfaced. These include the selection of an income base, an increase in the number of income tax returns, some chiselling, and interpretive questions concerning residence. Despite these difficulties, Due reports:

> The general experience with the system, in the views of the tax administrators, has been satisfactory. All prefer it to food exemption. Little effort is required for taxpayers to obtain the refund. A simple return is required if the person would not otherwise file a return. Computerization makes the handling of the claims for credits relatively simple. Social security numbers serve to prevent duplicate refunds.[1]

Regressivity and the Taxation of Housing

To apply the value-added tax to consumption expenditures for housing is one of the more troublesome areas posed by this tax. The difficulties encountered, however, stem from the nature of the consumption item itself and not the application of the tax. Ideally, the value-added tax would be applied both to cash rentals and to owner-occupied housing, where rental payments would have to be imputed. This ideal approach, however, is difficult to attain. As an imputed item of consumption, the rental payments of owner-occupied housing would be extremely troublesome because these "payments" do not pass through the market place. Further, if they were subject to the value-added tax, the number of potential taxpayers would increase enormously and thus administrative costs of the tax would be greatly increased. Congress never has given serious attention to taxing imputed rents of homeowners under the income tax. It therefore seems far-fetched to believe such consumption expenditures would be incorporated in a value-added tax. Indeed, to tax imputed rents, however logical in principle, would fly in the face of a proposal to provide property tax relief and undoubtedly would raise an outcry from those living on fixed incomes as well as the low- and middle-income classes that already are complaining bitterly about their property tax burdens. For these reasons, imputed rental payments of homeowners were excluded from estimates of the maximum feasible value-added tax base.

Cash rents and the purchase prices of new homes—items constituting $25.6 billion and $20.2 billion respectively of consumer spending in 1970—were retained in the very tough tax base to provide an estimate of a feasible, "second-best" solution. Inclusion of the cost of constructing new homes provides a method of reaching both owner-occupants and renters; over the years a considerable portion of the cost of housing would be reached.

Even this second-best approach, however, is beset by difficulties. To tax the purchase of a home would mean windfall gains for present owners who do not transfer their houses because their purchases were not subject to tax and current costs would not increase. Thus, the new purchaser would be discriminated against (*vis-a-vis* the purchaser prior to tax) and would face a heavy initial and immediate tax burden over and above his down payment. Unless additional funds for financing residences were made available, applying the value-added tax to the purchase of housing would conflict with the goal of expanding the supply of housing. The local property tax al-

ready represents a deterrent to investment in new housing while the Federal income tax favors householders.

If both new purchases and cash rentals are to be subject to the value-added tax, the above objections would undoubtedly be supplemented by two additional arguments. Although cash rents paid by individuals to firms would present no special difficulties to administering the VAT, some cash rents—including those paid in lodging houses—would. In the latter case, the landlord must be treated as a business firm, which while appropriate, may nonetheless lead to administrative and enforcement difficulties. Secondly, cash rentals constitute a relatively heavy burden for the low-income group, as shown in the Bureau of Labor Statistics study of 1960. Rental dwellings constituted 10.3 percent of income for those earning under $1,000, 11.5 percent for those in the $1,000-$1,999 income bracket, and successively lower percentages at income levels above $2,000. A tax on cash rentals, then, would add to the regressivity of the tax structure.

The key to applying the value-added tax to the housing sector lies in finding a solution to the tax treatment of owner-occupied housing. Taxing imputed values, the preferred approach, appears unrealistic; taxing purchases of new houses, while feasible, poses inequities between purchasers before and purchasers after adoption of the tax.[2] What is clear is that the value-added tax should not be applied to rental housing only. To do so, would further compound the inequities between owners and renters that stem from the income tax, (which permits homeowners to deduct interest payments on their mortgage and their property tax), and add to the regressive nature of the tax.

Preferred Treatment on Social Grounds

A second reason for providing preferential tax treatment is the more general judgment that certain items or services are not appropriate sources of taxation. In providing estimates of maximum feasible value-added tax bases, *(See Table 6)*, certain activities were excluded —religious and welfare activities and foreign travel expenditures (net). These activities are generally agreed to be worthy of an exemption. Nonetheless, various other activities—noted under the heading of possible base subtractions—might also be considered by many as equally inappropriate sources of taxation. Professor Due observes in his discussion of applying a retail sales tax to the service sector; "Those (services) generally regarded as unsuitable for taxation on grounds of general social policy include medical and dental service, hospitalization, education, (rental) housing, local transportation, and other categories."[3] This statement indicates that there is no precise delineation of exemptions on the grounds of general social policy.

European value-added taxes reveal a general pattern of granting exemptions for services provided by doctors, hospitals, old people's homes, educational establishments and postal institutions—all on the basis of general social policy. Few categories of goods are exempted, however. Exceptions to this are newspapers (exempt in four countries) and works of art (in three). Additional likely candidates for exemption on the grounds of general public policy include expenditures on research, religious and welfare activities (excluded from the maximum-feasible tax base), and admissions to legitimate theatres and entertainment of non-profit organizations as well as activities of clubs and fraternal organizations.

Zero-Rate Exemption.

Under this approach, the seller of an exempt product not only is free of tax on his sales but is entitled to claim a refund of all taxes he had paid on components that enter into his final product. Professor Shoup states, "When exemption from the value-added tax is clearly intended as a benefit to the exempt firm, not merely as an administrative convenience, such a firm must be allowed a credit for the tax on invoices of goods it buys from taxed firms, and the credit then gives rise to a *cash payment from the Treasury*" (emphasis in original).[4] Four European countries—Denmark, Netherlands, Norway and Sweden—refund the value-added tax paid at *earlier* stages on certain exempt goods and services.

Preferred Treatment Based on Administrative Considerations

Strong and convincing arguments favor a broad-based, comprehensive value-added tax.

Yet, such a tax would raise the administrative problem of handling a large number of returns.

In 1968, for example, there were some 11.7 million business—9.2 million proprietorships (individually owned businesses and farms), 0.9 million active partnerships and 1.5 million active corporations. Assuming exemption of owner-occupied housing, this 11.7 million figure would be a rough estimate of the number of potential taxpayers under a truly comprehensive value-added tax.

Sectoral Approach

Two ways have been developed to ease the administrative burden imposed by the large number of potential filers. One possibility is to exempt various occupational groups, agriculture being most frequently suggested. If this sector (including forestry and fisheries) were exempted, approximately 3.4 million or 30 percent of the potential value-added taxpayers would be removed from the rolls. The reduction in tax base, however, would be very much smaller—probably about 1 percent because of the large number of small firms with little value added—and because the vast majority of sales by this sector is to intermediaries (who could claim no credit for tax paid on such purchases and hence would be liable for tax on value added by themselves plus that in the agriculture sector).

The service sector is a second area frequently suggested for exemption. The reasons offered, however, are more varied than simply to reduce the number of potential taxpayers. Some services such as medicine and dentistry may be regarded as inappropriate sources of taxation; others, such as domestic help would be particularly difficult to reach by the tax. The exemption of all services, however, is suggested directly because of administrative considerations. If all services were exempt from the value-added tax, about 2.8 million firms or 24 percent of the total, would be eliminated; assuming approximately 40 percent of these services are provided to other firms, the reduction in the value-added tax base would be in the neighborhood of 7 percent.

Considerations of revenue loss and burden distribution, however, argue against blanket exemption of all services. Professor Harris has succinctly stated this position:

> Service industries constitute an increasing percentage of the nation's total output; they represent a substantial potential tax revenue source. If shops for hairdressing and other personal care, auto and TV repairs, entertainment and professional services, education and training, health and household services; if these and perhaps others were exempted, no adequate offset to loss of revenue would be possible in the form of higher rates on an earlier state of production. Although the revenue could be made up by heavier burdens on other things, the distribution of liability (as affecting ultimate taxpayers and types of producing firms) would not be the same as a tax covering retail and service establishments. In principle, the value of services as final output ought to be included no less than elements of worth embodied in physical goods.[5]

A third sector frequently mentioned for exemption purposes is retail trade. To exclude this sector would reduce the number of VAT taxpayers by about 18 percent but would cut revenue by nearly 11 percent. Retailers were exempt from the French tax up to 1968, but were then included partly at their request. Since retail sales are to final consumers, there is no possibility of recouping the lost revenues at a later stage of production. Moreover, retail firms in this country, are generally capable of complying with an income tax that is more complicated than the VAT.

Small Business Exemption

A second approach to ease the administrative burden imposed by the large number of reporting units under a truly comprehensive value-added tax would be to exempt small business.

As the large number of potential filers consists of numerous firms whose value added is small, an exemption for small business, would exclude a large number of returns and reduce the value-added tax base relatively little.

About 6.2 million of the 11.7 million proprietorships, partnerships and corporations in 1968 had receipts of under $10,000. *(See Table 11.)* To exempt these small firms from tax would eliminate 52.8 percent of the returns.

The revenue loss, however, would be minimal, only $18.5 billion, or 1.1 percent of receipts. Since small business would still pay

Table 11—PROPRIETORSHIPS, PARTNERSHIPS, AND CORPORATIONS—NUMBER AND BUSINESS RECEIPTS, BY SIZE OF RECEIPTS: 1968
(Number in thousands, receipts in millions of dollars.)

SIZE CLASS OF RECEIPTS	TOTAL		NUMBER			RECEIPTS		
	Number	Receipts	Proprietorships[1]	Active Partnerships	Active Corporations	Proprietorships[1]	Active Partnerships	Active Corporations
Total	11,672	1,706,137	9,212	918	1,542	222,105	80,532	1,403,500
Under $10,000[2]	6,163	18,470	5,545	342	276	17,095	981	394
$10,000-$25,000	1,968	30,941	1,659	150	159	26,874	2,399	1,668
$25,000-$50,000	1,259	43,254	958	130	171	33,945	4,608	4,701
$50,000-$100,000	931	63,509	610	121	200	42,431	8,562	12,516
$100,000-$200,000	606	82,463	292	94	220	40,171	13,109	29,183
$200,000-$500,000	420	124,596	119	59	242	34,394	17,690	72,512
$500,000 or more	322	1,342,905	27	21	274	27,195	33,184	1,282,526
Percent distribution	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under $10,000[2]	52.8	1.1	60.2	37.3	17.9	7.7	1.2	(z)
$10,000-$25,000	16.9	1.8	10.8	16.3	10.3	12.1	3.0	0.1
$25,000-$50,000	10.8	2.5	10.4	14.2	11.1	15.3	5.7	0.3
$50,000-$100,000	8.0	3.7	6.6	13.2	13.0	19.1	10.6	0.9
$100,000-$200,000	5.2	4.8	3.2	10.2	14.3	18.1	16.3	2.1
$200,000-$500,000	3.6	7.3	1.3	6.4	15.7	15.5	22.0	5.2
$500,000 or more	2.8	78.7	0.3	2.3	17.8	12.2	41.2	91.4

z Less than 0.05 percent.
[1]Individually owned businesses and farms.
[2]Includes businesses with no receipts.
Source: U.S. Department of Commerce, Bureau of the Census, *Statistical Abstract*, 1971, p. 460.

tax on their purchases (only the value added by the small firm would be exempt), the revenue drainage would be even less than the 1.1 percent figure.

The concentration of the value-added tax base is evident in other data. For example, 332,000 firms or 2.8 percent of the total number of proprietorships, partnerships and unincorporated businesses had receipts of $500,000 or more; the total receipts of these largest business firms constituted 78.7 percent of receipts for all such entities. The large number of small firms with small receipts and the small number of large firms with large receipts afford numerous possible tradeoffs between the number of returns eliminated and the percentage of receipts removed from the potential tax base.

The trade-off possibilities are shown in the following example. Because $50,000 in receipts is the smallest figure for which an industry breakdown is available, this figure is used—purely for the purpose of illustration—as a cutoff point for exempting "small" business. This would exempt the vast majority of business enterprises in each of eight broad industrial classifications. *(See Table 12.)* More specifically, the exemption would include:

—3.2 million, or 96.2 percent, of those engaged in agriculture, forestry and fisheries.
—61,000, or 88.4 percent, of those in mining.
—706,000, or 84.2 percent, of those firms engaged in construction.
—287,000, or 74.0 percent, of those in manufacturing.
—331,000, or 90.2 percent, of the firms in transportation, communication, electric, gas and sanitary services.
—1.8 million, or 69.9 percent, of those engaged in wholesale and retail trade.

—1.2 million, or 95.2 percent, of firms in finance, insurance and real estate.
—2.6 million, or 91.3 percent, of those engaged in the service trades.

The definition of small business is subjective, and the exemption of business with less than $50,000 in receipts would be unacceptable to some; nonetheless, it is the smallest figure that permits an industry breakdown. Nor are "business receipts" the same magnitude as "value added." Despite these "crudities," it seems amply clear that almost any reasonable definition of "small business" removes large numbers of enterprises from the value-added tax rolls.

Legislative Precedents

The administrative problems posed by a very broad-based value-added tax and its consequent large number of potential taxpayers have long been recognized in legislative proposals, both here and abroad. The Michigan Business Activities Tax provided an exemption for each taxpayer's first $12,500 of adjusted receipts. Coupled with other restrictions on the tax base, this provision had the effect of relieving or eliminating small businesses, professionals and farmers from the tax. A similar technique—that is, a specific monetary exemption (of 90,000 yen)—was incorporated in the value-

Table 12—PROPRIETORSHIPS, PARTNERSHIPS, AND CORPORATIONS—NUMBER, RECEIPTS, AND NET PROFIT, BY INDUSTRY AND SIZE OF BUSINESS RECEIPTS: 1968

(Money figures in millions of dollars. See headnote, table 111)

ITEM	PROPRIETORSHIPS			ACTIVE PARTNERSHIPS			ACTIVE CORPORATIONS		
	Under $50,000[2]	$50,000-$99,999	$100,000 or more	Under $100,000[2]	$100,000-$499,999	$500,000 or more	Under $500,000	$500,000-$999,999	$1,000,000 or more
All industrial divisions:[3]									
Number . . . . .1,000 . .	8,163	610	439	743	153	21	1,268	122	152
Business receipts[4]	77,914	42,431	101,760	16,549	30.798	33,184	131,325	85,198	1,257,243
Net profit[3]	16,900	7,698	7,272	2,695	5,305	3,404	3,798	2,833	79,331
Agri., forestry, fisheries:									
Number . . . . .1,000 . .	3,096	78	32	109	12	1	28	2	2
Business receipts[4]	24,168	5,305	7,889	2,399	2,102	843	2,578	1,274	5,164
Mining:									
Number . . . . .1,000 . .	39	2	3	12	1	(z)	10	1	1
Business receipts[4]	291	162	767	130	275	565	994	615	12,183
Construction:									
Number . . . . .1,000 . .	569	53	42	38	10	2	99	12	15
Business receipts[4]	6,040	3,725	9,569	1,202	2,132	4,031	13,080	8,597	48,554
Manufacturing:									
Number 1,000 . .	140	17	7	23	7	2	124	26	42
Business receipts[4]	1,544	1,192	3,936	689	1,622	3,220	19,517	18,259	595,149
Transp., Comm., electric, gas, sanitary services:									
Number . . . . .1,000 . .	262	14	10	13	2	(z)	56	5	5
Business receipts[4]	2,940	995	2,239	348	409	474	5,580	3,330	100,221
Wholesale and retail trade:									
Number . . . . .1,000 . .	1,338	289	283	130	68	11	342	59	71
Business receipts[4]	19,294	20,351	67,247	4,846	14,287	15,299	52,860	41,314	348,335
Finance, Ins., real estate:									
Number . . . . .1,000 . .	491	15	9	282	15	2	389	8	10
Business receipts[4]	4,198	1,040	2,522	3,084	2,749	3,565	17,538	5,522	123,844
Services:									
Number . . . . .1,000 . .	2,204	141	45	136	37	4	214	9	6
Business receipts[4]	19,345	9,649	7,553	3,839	7,217	5,170	18,493	6,287	23,763

z Less than 500.
[1]Includes individually owned businesses and farms.
[2]Includes businesses without receipts.
[3]Includes business not allocable to individual industries.
[4]See footnote 2, table 715.
[5]Less loss. See footnote 4, table 711.

Source of tables 713 and 714: Dept. of the Treasury, Internal Revenue Service; *Statistics of Income, 1968, Business Income Tax Returns.*

added tax proposed by the Shoup Mission for the prefecture governmental level in Japan, but never enacted. Although not offering a specific technique to deal with small businesses, the Richardson Committee, in its 1964 Report on Turnover Taxes in England, cited this problem as one of its reasons for concluding that a value-added tax could not realistically be universal in scope:

> In almost all countries, indirect tax systems contain some provision for excusing from tax, within limits, goods and services produced by small business—for example, self-employed workers. The administrative effort and cost which a universal value-added tax would involve would be so large that it seems to us certain what some provision for exclusions or exemptions would be necessary.[6]

A novel version of the exemption for small business was contained in the proposed value-added tax for the State of West Virginia. In this case, the specific dollar exemption varied inversely with the amount of value added; the specific schedule being:

Value-Added	Exemption
$100,000	$10,000
100,000-119,999	9,000
120,000-139,999	8,000
140,000-159,999	7,000
160,000-179,999	6,000
180,000-199,999	5,000
200,000-219,999	4,000
220,000-239,999	3,000
240,000-259,999	2,000
260,000-279,999	1,000
280,000 and over	—0—

Thus, all businesses with less than $280,000 in value added were entitled to either a total or a partial exemption.

Forfeit Procedure

The small business problem has been combined with the need to ease taxpayer compliance in the French value-added tax vy the "forfait" (forfeit) system. The French VAT utilizes four rates and has numerous exemptions. This type of tax requires extensive bookkeeping since each transaction, sale and purchase, must be itemized to record or to claim tax liability and tax credits. The accounting requirements for taxpayers, of course, would be simpler under a uniform-rate, no-exemption type value-added tax. Indeed, the French record-keeping requirements were sufficiently severe to lead to a revolt by small taxpayers which resulted in the forfait system in 1955.

The forfait system—restricted to the small taxpayer—still requires some bookkeeping but simplifies this matter by relying upon estimates rather than detailed accounts for determining tax liability. The small taxpayer in France is required to self-assess his annual taxable receipts, annual purchases, total wages and number of workers. This information is then discussed with the tax administrator, and an agreement is reached on the annual tax to be paid. The same tax is collected automatically in the second year. If at the end of the second year, the agreement is not rescinded by either the taxpayer or the tax administrator it remains in effect for an additional two years.

Since it seems highly unlikely that a tax as complicated as the French value-added tax would be adopted here, at least initially, the need for such an estimating system is questionable. Moreover, the forfait system is really only a negotiated tax payment and would be contrary to tax traditions in this country. Should a U.S. value-added tax prove to become complex or burdensome to comply with, the forfait system of estimating tax liabilities could be considered, at best, as one possible method of alleviating the difficulty.

Normal Exemption

The normal exception is the standard procedure for granting exemption from the value-added tax for reasons of administrative convenience. Under this technique, the seller pays no tax on his sales, but he is also denied credits for the taxes paid on components that enter into the saleable product. Since the seller of exempt products is not allowed to claim credits for tax paid on his purchases of intermediate goods and services, the normal exemption does not result in a large revenue drain to the imposing jurisdiction. Nonetheless the normal exemption technique poses at least three problems—all of which can, in fact, work to the disadvantage of the exempt sector.

First, no credit could be taken for the purchase of investment goods. Compared to other sectors where such credits for investment in

capital goods are allowed, under either the consumption- or the income-type value-added tax, investment by the exempt sector is placed at a disadvantage.

Second, the exempt sector would have an incentive to produce business activities "in house" when possible. Provision of some component service or step in the production process does not generate any taxpayer liability if performed by employees, but does generate tax liability if purchased in the marketplace. This inducement toward internal production exists whether the exempt firm can shift its tax payments forward or must absorb them. In either case, profits would be higher because internal production escapes the tax bite. In some instances this inducement would lead to a less efficient allocation of resources, though the magnitude of this inducement would depend critically on the tax rate.

Even with low rates, a policy of normal exemptions could constitute an unchangeable rule of the game. As such, higher future value-added tax rates could lead to more serious economic distortions.

Third, the normal exemption could also result in overtaxation. If sector A is granted a normal exemption, sales of its product to sector B cannot be deducted by the purchaser. When sector B sells its own final product, it would effectively be held taxable on the value added by itself, plus the full value (rather than value added) by sector A. As a result, the intermediate goods and services purchased by the exempt sector would be taxed twice—first when purchased by sector A, because no credit is allowed, and again when the final product of sector B is sold; because B could not deduct these purchases from sector A, and they are included in the value added by sector B. Professor Shoup explains this with regard to Danish experience, where lawyers and most other professions are exempt:

> "The independent lawyer buys materials and supplies, and even capital equipment (furniture for example), on which his vendor charges him tax at the value-added tax rate, applied to the vendor's sales (The vendor of course gets credit for the tax he in turn has paid earlier to his vendors, but that fact does not concern the lawyer vendee). The business firm purchasing the lawyer's services presumably has this tax passed on to it, or largely so, in the price of those services, but when that firm comes to sell the goods in which the lawyer's services are embodied, it can claim no tax credit on this score, since the tax credit chain has been broken, and therefore no tax appears on the bill that the lawyer has submitted to it. The firm will do better on this point to buy the lawyer's supplies itself and provide him with them, but this arrangement is normally practical only if the lawyer is an employee."[7]

Shoup's statement illustrates a tax-induced change in the production process. Although the value-added tax rate is high in Denmark, 12½ percent, the re-allocation of resources is not a serious problem since few such exemptions are granted. Nor does the problem arise where professional services are rendered to final consumers—that is households.

Nonetheless, the possibility exists, and Shoup further states, "If the Danish tax rates rise, however, this double-taxation aspect of the exemption of professionals may become important enough to warrant placing at least some of them under the value-added tax, or giving them an *option to enter* the *system*, for their own protection and for the protection of their vendees."[8] (Emphasis in original.) Since publication of the Shoup article, Denmark, France, Germany and Luxembourg have granted certain providers of goods and services the option of taxable status under the value-added tax.

The normal exemption could also exacerbate taxpayer compliance and administrative problems. If applied to small businesses selling intermediate products, or to particular products, the business making the final sale must keep separate records of each transaction in order to claim rebates on items entering into its taxable sales. So long as the value-added tax is truly comprehensive in coverage, the necessity of separate records is avoided. The comprehensive tax base therefore removes a complication to tax officials checking for unintentional errors and a source of annoyance to businessmen.

Problems in Determining Value Added

Although the concept of value added is in itself easily understood, the computation of value added by certain taxpayers can be exceedingly complex. Indeed, certain activities or sectors may be exempt from the tax or receive

preferential tax treatment simply because of the difficulty of applying the tax.

Expense Accounts

Expense accounts are not included in the national income data on wages and salaries paid to employees. The problem introduced by expense accounts, one that also arises with the income tax, relates to the fact that they represent, at least in part, payments made by one company to another through an intermediary, the employee. If expense accounts are "padded," however, they in fact comprise two items —a payment to another firm plus what represents a supplement to the employee's wages or salary. While the payment to the other company should be deductible for the paying firm in calculating its value-added tax base, the part that constitutes a supplement to the employee's earnings should be included in the tax base.

If all expense accounts were deductible, the "padded" component would result in tax evasion. To prevent this, it would be necessary to treat all expense accounts as wages—thereby forcing business firms to make direct payments for their legitimate business expenses in order to claim their rightful value-added tax deductions. This was the "solution" worked out in the proposed Japanese value-added tax of the early 1950s.[9]

Financial Institutions

Perhaps the knottiest problems of all arise over applying a value-added tax to the financial sector. Indeed, this was one reason why the Richardson Committee in its *Report of the Committee on Turnover Taxation* in Great Britain concluded that a value-added tax payable by all businesses at a uniform rate was unrealistic. "A value-added tax is not well adapted for the taxation of transactions in money, in securities and in insurance and we think that some exemptions for these classes of transactions would be likely."[10] This observation has been borne out by experience in foreign countries.

The source of these difficulties is that financial institutions provide services for which value added is not easily identified. Additionally, there is a problem of maintaining equal treatment of lending by financial institutions and by individuals (which would be particularly difficult to enforce if subject to tax). The pure insurance element of life insurance, the processing of checks and the several elements of a consumer loan are all examples where value added by financial institutions is not clear-cut and for which there is usually no clear charge. When such services are supplied to other businesses, exemption of the financial institutions poses no revenue loss since the value becomes taxable as part of the final product of the purchaser of such services. When performed for the final consumer, the value of the service provided by the financial institutions belongs, at least theoretically, in the tax base; in practice, it would be difficult to include.

The national income accounts imputs these nonmarket services performed by financial institutions.

For commercial banks, for example, nonmarket services are financed by investing deposits and retaining part of the property income earned. If instead commercial banks put each transaction through the market place, they would pay out to individuals the interest income they otherwise would have retained, and would charge fees for the otherwise "free" banking services. As these transactions are not made in the market place but do represent services performed, imputations are made in the national income accounts—on the income side by adding imputed interest paid (equal to property income received minus interest paid on deposits), and on the product side by adding imputed service charges (equal to total operating expenses of banks, including profits, less monetary service charges).

Negligible or even negative value added by commercial banks would result if the services covered by imputations were excluded. In a very simple example, the income side of their account would consist only of wages paid plus a very small or probably negative amount for net interest paid—since banks typically receive more interest than they pay out. On the product side, bank receipts would consist only of those services covered by fees or charges less their purchases from other firms.

Actual Experience

At least partly because of the difficulties involved, European countries exempt financial institutions from the value-added tax. *(See*

Table 13—Treatment of Financial Institutions Under The Value-Added Tax in European Countries

Country	Insurance	Brokerage	Stock Exchanges Transactions	Banks & Credit Institutions
Belgium	Exempt	Exempt	Exempt	Exempt
Denmark	Exempt	Exempt	Exempt	Exempt
France	Exempt[1]	Exempt[1]	Exempt[1]	Exempt[1]
Germany	Exempt[1]	Exempt[1]	(N.A.)	Exempt
Luxembourg	Exempt	Exempt	Exempt	Exempt
Netherlands	Exempt	Exempt	(N.A.)	Exempt
Norway	Exempt	Exempt	Exempt	Exempt
Sweden	Exempt	Exempt	Exempt	Exempt

Notes: [1]Subject to specific taxes other than VAT.
(N.A.) Information Not Available

Source: Cambridge Research Institute, *The Value-Added Tax in the United States,* a Report Prepared for the American Retailers Federation, 1970, p. 37.

Table 14—Calculation of Value-Added for Financial Institutions and General Business Under Japanese Value-Added Tax

Financial Business

Addition Method
Net Profits
+ Payroll
+ Rent paid
+ Depreciation charges
+ Additions to capital assets

Subtraction Method
Total Receipts
—Rent received
—Interest paid
—Goods and Services purchased from other firms

General Business

Addition Method
Net Operating Profits
+ Payroll
+ Interest paid
+ Rent paid
+ Depreciation charges
—Additions to capital assets
—Additions to inventory

Subtraction Method
Total Receipts
—Rent, interest, and dividends received
—Goods and Services purchased from other firms
—Other business taxes

Source: M. Bronfenbrenner, *op. cit.*, p. 307.

Table 13.) Based on available information insurance, brokerage of all kinds, stock exchange transactions and banks and credit institutions are exempt from the value-added tax in eight European countries. In France, each of these four types of financial institutions is subject to a specific tax other than that on value added, and this is also true in Germany, though only for insurance and brokerage firms. The Michigan Business Activities Tax, from 1953-1967, exempted insurance companies, banks, trust companies, building and loan association, parimutuels and finance companies, all of which were subject to other specific state franchise or excise taxes.

Alternative Solutions

Obviously, one "solution" to the problems posed by financial intermediaries is to exempt this sector. Since about one-half of the services performed by financial institutions is for other businesses, the revenue drain from exempting

this sector would not be serious. Inequities would result, however, because services performed for final consumers would escape the tax. Moreover, because financial services are a more important budget component for the wealthy than for the less affluent, exemption would seemingly add to the regressivity of the value-added tax.

To avoid relying upon imputed values in the tax base, while at the same time taxing financial institutions on more than their market-type activities, the Shoup Mission to Japan proposed a special set of definitions for financial institutions. Under this proposal—and for financial institutions only—interest and dividends were included in value added by the receiver and not in value added by the payor. Thus, on the income side, there was no item for net interest paid; while on the product side, value added was to be calculated as total receipts (including interest and dividends) less interest paid, among other items. For general business, these items were included in value added by the payor and not the receiver. *(See Table 14.)*

One shortcoming of this approach, however, was that it led to an element of double taxation of interest and dividends. Such items were taxable when received by commercial banks, trusts, insurance companies and money lenders and were again taxable when paid by the general business sector. On the other side of the coin, a gap in coverage resulted from this dual treatment of interest and dividends. That is, interest paid by the financial sector was deducted in computing their tax base but was excluded from the tax base of general business.

A second omission from the proposed Japanese value-added tax base related to firms engaged in managing real estate. Since rent paid by general and financial businesses was included in their value-added tax base, the omission of the real estate sector was designed to avoid "double-taxation" which would have resulted if the tax were applied to the rental receipts of such firms. By omitting the entire property-management sector, however, this solution diluted the aggregate tax base to the extent of value added by the real estate sector and reflected in service charges relating to the management of property used in non-business activities.

More recently, Professor Shoup has indicated that financial institutions could be subject to the value-added tax on their services provided to customers free of charge, at least in an approximate manner. Rather than rely upon an imputed value for these services, Shoup would tax the financial institution on its payroll and then divide its payroll between services to business firms, so they could claim a credit on these "purchases," and services to individuals. Shoup suggests the number of checks handled to divide service between classes of customers.

Clara Sullivan, in her book *The Tax on Value Added,* notes the dual set of rules applied in the Japanese proposal could be avoided by treating interest and rent differently than in the national income accounts. That is, interest paid to individuals is measured directly (gross) while interest received by business is taxed, net of certain expenses. In the case of rent, Sullivan suggests that such receipts be treated as a

Table 15—Gross Product Tax Base, Sullivan Approach

Addition Procedure	Subtraction Procedure
Wages and Salaries	Net Receipts from Sales,[2] from the Supply of Services Including Rents, and From Interest
Interest Paid to Individuals	Capital Investment on Force Account[3]
Income Type of Value-Added Profits,[1] Excluding Subsidies	Inventory Accumulation
Depreciation	Owner's Personal Consumption of Firm's Products
	Minus Purchases of Goods and Services from other Firms on Current Account[4]

Notes: [1]Profits should include estimated profits on the owners personal consumption of the firm's products but this imputation may be omitted for administrative reasons.
[2]Net of returns, cancellations, cash discounts and bad debts.
[3]Construction of plant and equipment by the firm for its own use.
[4]Including outlays on interest paid to other businesses and on rents.

Source: Clara K. Sullivan, *The Tax on Value Added,* New York: Columbia University Press, 1965, p. 212.

Table 16—Net Income Type Tax Base, Sullivan Approach

Addition Procedure	Subtraction Procedure
Wages and Salaries	Receipts from net Sales,[2] from the supply of services including rentals, and from interest.
Interest paid to Individuals	Investment on Force Account
Value-Added Profits[1]	Inventory Accumulation
	Owners Personal Consumption of Firm's Products
	Minus Current Account Purchases of Goods and Services from other Firms
	Minus Depreciation

Notes: [1]Profits should include estimated profits on the owner's personal consumption of the firm's products but the imputation may be omitted for administrative reasons.
[2]Net of returns, cancellations, cash discounts and bad debts.
[3]Including outlays on interest paid to other businesses and on rents.

Source: Clara K. Sullivan, *The Tax on Value Added,* New York: Columbia University Press, 1965, p. 204.

Table 17—Consumption Type Tax Base, Sullivan Approach

Addition Procedure	Subtraction Procedure
Wages and Salaries	Receipts from Net Sales,[2] from Supply of Services Including Rents, and from Interest
Interest paid to Individuals	Owner's Personal Consumption of Firm's products
Income type of Value-Added Profits[1]	Minus All Purchases from Other Firms[3]
Depreciation	
Sales of Capital Assets	
Minus Capital Outlays	
Minus Net Additions to Inventories	

Notes: [1]Profits should include estimated profits on the owner's personal consumption of the firm's products but the imputation may be omitted for administrative reasons.
[2]Net of returns, cancellations, cash discounts and bad debts and including sales of capital assets.
[3]Including outlays on interest paid to other businesses and on rents.

Source: Clara K. Sullivan, *The Tax on Value Added,* New York: Columbia University Press, 1965, p. 210.

receipt from a supply of services rather than a factor payment. Calculation of the tax base for each type of value-added tax—that is, the gross product, income-type and consumption-type for the Sullivan approach are presented in Tables 15, 16 and 17. It should be noted that her value-added profit item differs from the profit figure computed for the Federal income tax. This difference is largely attributable to the deduction of dividends received from other firms, by adjustments to eliminate the gains or losses from capital transactions and by the inclusion of depletion and State income taxes in the value-added profit figures.

The Government Sector

In preparing quantitative estimates of potential yields for the different types of value-added tax, government purchases—Federal, State and local—were excluded. The reason for excluding the Federal sector—where purchases of goods and services for 1972, 3rd quarter total some $105.4 billion (seasonally adjusted at annual rates)—was to give some idea of the net productivity of the tax. If income arising from production of goods and services purchased by the Federal government were made taxable and if the tax were shifted forward, the higher prices would increase Federal expenditures to offset the increased Federal revenues resulting from the broader tax base.

A substantive case can be made for excluding the governmental sector. Excluding both purchases and value added by government avoids taxation of public spending and prevents the government from participating in a mere transfer of funds.

Government purchases and value added could be excluded in the base of the tax, there-

by avoiding the necessity of distinguishing what is a government and what is not. This would of course add considerably to the number of potential taxpayers since it would encompass not only all local governmental bodies but quasi-governmental units or nonprofit public institutions that also provide public services.[11]

Where public agencies provide goods and services that compete with those sold by the private sector, exemption of the former would provide a tax-induced competitive advantage. State and local governments, for example, sell electric, gas and water power, provide transportation and entertainment services, etc. Activities such as these compete with private sector counterparts. They should be held taxable to avoid providing a competitive advantage to the public sector.

With regard to the State-local sector, however, there are two further considerations. Perhaps the most obvious point is that the general posture of the Federal government has been to aid, rather than to tax, these governmental units. Indeed, Federal aid has increased from $6.7 billion in 1959 (12.3 percent of State-local revenues), to $29.8 billion in 1971 (17.9 percent of State-local revenues). Moreover, such assistance is expected to climb to an estimated $43.5 billion by 1973 (21.1 percent of State and local governmental revenues).[12] To tax the sales to States and localities, where purchases of goods and services are currently (1972, 3rd quarter) running at $150.2 billion (seasonally adjusted at annual rates) would add to the financial needs of these governmental units.

Application of a Federal tax to State and local governments also might raise constitutional questions of intergovernmental immunities—whether the Federal government has the legal authority to tax States and their localities under a value-added tax. If the Federal tax were drafted in such a way that it was held to fall on the buyer of services that are "sold" by States and localities, with the seller (State and local governments) simply acting as collection agents, such problems might be mitigated.

The issues relating to the value-added tax and the governmental sector in Europe have been summarized:

> Generally, they (governmental services) are taxable when the services compete with private business. In theory, government activities probably should be taxable in any event to determine the proper allocation of economic resources even though no net budgetary result is effected. If exempted there could well be an inclination to hoard labor to avoid the VAT by producing items which might otherwise be purchased on the outside.[13]

In conclusion, then, aside from the question of Constitutional restrictions, it seems preferable to include governmental activities within the sphere of the value-added tax. This would avoid introducing distortions between the public and private sectors where public and private bodies sell competing goods and services. Such a policy would further avoid the necessity of distinguishing what constitutes a government and what does not and would ease the taxpayer compliance problem since those who sell to governments would not have to itemize sales and keep separate accounts of their business activities. A possible drawback is the number of potential taxpayers that would be added.

Apart from the question of Constitutional restrictions, the issue of taxing the State-local sector remains somewhat complex. To include these governments in the tax system conflicts with the general posture of Federal assistance; to exclude them requires the itemization of sales by those who deal with the State-local sector. To resolve the conflict, it seems preferable to have the tax applied to State and local purchases and then to make refunds to these governmental units. Such a policy would utilize a direct subsidy to the State-local sector rather than the exemption feature. The refund approach would, however, add to administrative costs.

Other Techniques of Preferential Tax Treatment

Differential Rates

An additional technique for providing preferential tax treatment is to use a multiple-rate schedule, thereby giving preferred status to those commodities—and those individuals who purchase them—taxed at lower rates. There are two main purposes for which this technique is used—to alter the burden of the tax to make this distribution somewhat more progressive

and to sharply curtail the consumption of selected items.

Several of the European countries have multiple-rate value-added taxes. In part, this reflects the changeover from the previous taxes which were replaced by introduction of the value-added tax. Variations in rates, however, are quite extreme. France has a reduced rate of 7.5 percent, an intermediary rate of 17.6 percent, a standard rate of 23.0 percent and an increased rate of 33.33 percent. Belgium, the only other country to use a four-rate schedule, taxes at a reduced rate of 6.0 percent, an intermediary rate of 15.0 percent, a standard rate of 20.0 percent and an increased rate of 25.0 percent. West Germany, Netherlands and Luxembourg all use a two-rate schedule—in Germany, 5.5 percent and 11.0 percent; in the Netherlands, 4.0 percent and 12.0 percent; and in Luxembourg, 4.0 percent and 8.0 percent.

There is general agreement that the use of differential rates is a rather clumsy way to achieve the intended objectives. Adjustments to achieve greater progressivity are much easier to make via the income tax than via a value-added or other sales levy because there is no neat coincidence between types of commodities purchased and income level. Aside from distorting consumer preferences, a multiple-rate value-added tax has the disadvantage of not achieving its result because higher-income people buy more or better quality items of a given commodity type—rather than completely different commodities—than do those of lower incomes. Moreover, multiple rate value-added taxes undoubtedly complicate administration of the tax and give rise to protests from those purchasing and selling the higher rate commodities.

Instead of introducing a multiple rate structure to curtail the consumption of selected items, a preferable approach would be to impose a supplementary excise tax on these commodities and administer this excise tax independently.

Reduced Base

A lesser used technique to offset and alter the burden distribution of the value-added tax is to apply a reduced taxable base rather than multiple rates to those items deemed worthy of preferential tax treatment. Although this technique avoids specific introduction of a multiple-rate schedule, it has the same pitfalls. The reduced base concept is used in Sweden, where buildings have a taxable base equivalent to 60 percent of the normal base.

FOOTNOTES

[1]John F. Due, *State and Local Sales Taxation: Structure and Administration*, Public Administration Service, Chicago, Illinois, 1971, p. 72.

[2]Most States tax only the materials going into real property construction.

[3]John F. Due, *Sales Taxation*, Urbana, University of Illinois Press, 1959, p. 375.

[4]Carl S. Shoup, "Experience With the Value-Added Tax in Denmark and Prospects in Sweden," *Finanzarchiv*, 28, March 1969, pp. 242-43.

[5]C. Lowell Harris, "Value-Added Taxation," reprinted in *Innovations in Tax Policy and Other Essays, Selected Writings of C. Lowell Harris*, John C. Lincoln Institute, Hartford, Cvnnecticut, 1972, p. 262.

[6]*Report of the Committee on Turnover Taxation*, 1964, London, Her Majesty's Stationery Office, p. 57.

[7]Shoup, *op. cit.*, p. 254.

[8]*Ibid.*, p. 243.

[9]M. Bronfenbrenner, "The Japanese Value-Added Sales Tax," *National Tax Journal*, Vol. III, No. 4, December 1950, p. 305.

[10]*Report of the Committee on Turnover Taxation*, Presented to Parliament by the Chancellor of the Exchequer by Command of Her Majesty, March 1964, London, England, p. 57.

[11]Francesco Forte, "On the Feasibility of a Truly General Value-Added Tax: Some Reflections on the French Experience," *National Tax Journal*, Vol. XIX, No. 4, Dec. 1966, p. 354.

[12]Office of Management and Budget, *Federal Aid to State and Local Governments*, Special Analysis P, January 1972.

[13]B. Kenneth Sanden, "The Value-Added Tax—What It Is, How It Works—Experience in Foreign Countries," *Paper presented at the Tax Institute of America Symposium*, November 15, 1972.

Chapter IV

Sources of Additional Federal Revenues: The Individual Income Tax and Estate and Gift Taxes

522-874 O - 73 - 5

By far the most prominent alternative to raising substantial additional Federal revenues from a value-added tax is to make more intensive use of the personal income tax. A survey undertaken for this Commission by Opinion Research Corporation revealed that the American public prefers income tax reform to enactment of a value-added tax by a margin of 40 percent to 34 percent.

Specifically, respondents were asked, "Suppose the Federal government must raise taxes substantially, which of these do you think would be the best way to do it?

1. Collect a value-added tax (VAT), a form of national sales tax on things other than food and similar necessities.
2. Raise individual income tax rates.
3. Raise money by reducing special tax treatment for capital gains and cutting tax deduction allowances for charitable contributions, State and local taxes, medical expenses, etc.
4. Don't know.

The nationwide response showed that 40 percent preferred reform of the individual income tax, 34 percent favored the value-added tax, 10 percent were most inclined toward raising rates on the individual income tax and 16 percent indicated they did not know.

Income Tax Reform

Two studies, *Sources of Revenue Erosion* by Joseph Pechman and Benjamin Okner of The Brookings Institution, and the subsequent Brookings book, *Setting National Priorities, the 1973 Budget*, present tax reform proposals of interest to this analysis. Although these are by no means the only proposals for reforming the personal income tax, the former is the most comprehensive of the recent income tax reform programs while the latter is designed to yield amounts needed to relieve the local property tax of the school finance burden.

Pechman and Okner define a comprehensive tax base that constitutes the "norm" by which they gauge the extent of erosion.

The necessary changes to the present Federal income tax law to achieve the comprehensive tax base are:

- taxing realized capital gains and gains transferred by gift or bequest as ordinary income;
- eliminating the tax exemption for interest from State and local government bonds;
- limiting depletion allowances to cost depletion;
- taxing the interest on the current-year increments in the cash surrender value of life insurance policies;
- including net imputed rent in taxable income and eliminating deductions for real property taxes and mortgage interest;
- taxing transfer payments—that is, social security and railroad retirement, public assistance, workmen's compensation, unemployment insurance and veterans disability insurance—as ordinary income;
- eliminating all itemized deductions except those for State income taxes, medical expenses in excess of five percent of income, charitable contributions in excess of three percent of income and interest up to the amount of property income reported on the tax return;
- eliminating the standard deduction but not the low-income allowance;
- eliminating the special exemptions for the aged and blind and the retirement income tax credit;
- eliminating the dividend exclusion;
- eliminating the rate advantage, but not the mechanics, of income-splitting for married couples; and
- eliminating the maximum tax on earned income.

Although this definition of the comprehensive tax base is indeed comprehensive, it is nonetheless subject to certain constraints imposed by historical or administrative considerations. For example, capital gains are included only when realized or transferred to others, not as they accrue; gifts and inheritances are excluded from income, but still subject to the estate and gift tax; a separate corporate income tax is retained, with dividends taxed in full at the personal level; employer contributions to private pension plans are not considered to be current income to the employee.

Broadening The Tax Base and Effective Rates

Adoption of this comprehensive tax base would broaden substantially the reach of the personal income tax. As a result, effective rates of the personal income tax would fall dramatically.

In three terms familiar to taxpayers, the comprehensive tax base approach would increase *adjusted gross income* at 1972 income levels by $138.2 billion from $776.1 billion to $914.3 billion, about 17.8 percent. *Taxable income* would jump by 35 percent, from $478.2 billion to $644.2 billion, an increase of $166.0 billion. *Tax liability*, in the aggregate, would rise from $102.9 billion to $180.1 billion, an increase of $77.2 billion or 75 percent.

The largest single source of additional Federal income tax revenues stems from removing the rate advantage of income-splitting for married couples. This single step toward the comprehensive tax base would add $21.6 billion in Federal revenues, an amount equal to 27.8 percent of the total expansion in tax liabilities and the equivalent of 20.8 percent of the 1972 tax liabilities. *(See Table 18.)*

Equally dramatic is the effect of the comprehensive base on both nominal and effective tax rates. In striking contrast to the current nominal marginal rates of 14 and 70 percent, adoption of the comprehensive tax base could reduce nominal rates by more than 40 percent. Moreover, effective income tax rates (calculated as a percentage of the comprehensive tax base) would range from 0.5 percent for those with adjusted gross incomes to less than $3,000, to a maximum of 32.1 percent for those with adjusted gross incomes of $1,000,000 and over. Thus, when the Federal tax actually paid is related to the comprehensive tax base, effective rates would be rather low throughout the entire income range. For those with comprehensive incomes of less than $20,000—which includes about 85 percent of the taxpayers—the highest effective rate would be only 10.7 percent of income and the average effective rate would not rise to over 25 percent until a comprehensive income level of $100,000 were reached.

Added Tax Liabilities by Income Class

Since the comprehensive tax base is a package consisting of several parts, it would be possible to choose a desired amount of revenue and to construct alternative packages of tax reforms with a view to their impact on burden distributions by income class. It is also possible to examine the critical question of what income groups will be called upon to make the additional tax payments that would result from a variety of individual income tax reforms. In the analyses that follow, three broad income groups have been used to illustrate the impact of tax reform proposals: low income (less than $5,000 a year), middle income ($5,000 to $25,000 per year); and upper income ($25,000 and over).

Upper-income class. Four tax reform features would affect mainly the upper income group. Taxation of capital gains would add a total of $13.7 billion to Federal tax revenues. The upper-income group would pay the vast amount of the increased liabilities—some $11.9

Table 18—Revenue Effect of Various Erosion Features

Feature	Increase in Revenues (in millions)
1. Removal of rate advantage of income splitting	$21,565
2. Taxation of realized capital gains and gains transferred by gift or bequest	13,708
3. Taxation of transfer payments	13,074
4. Elimination of homeowners' preferences	9,642
5. Removal of percentage standard deduction	7,122
6. Elimination of most itemized deductions	4,147
7. Elimination of aged and blindness exemptions	2,888
8. Taxation of life insurance interest	2,685
9. Removal of tax exempt interest, dividend exclusion, excess depletion and other preference income	2,426

billion, or 87 percent of the amount generated by this reform. Taxation of various items of preference income (tax-exempt interest, dividend exclusion, excess depletion and other preference income) would add $2.4 billion in total—$2.0 billion from those with incomes $25,000 and over. Elimination of other itemized deductions would produce a total of $4.1 billion in added revenues, and 64 percent of the amount, or $2.7 billion, would come from the upper income group. The three reforms together would produce an additional $20.3 billion in Federal income tax revenues, with some $16.6 billion, or 81.7 percent, being paid by those earning $25,000 or over.

Removal of the rate advantage of income splitting would draw most of its increased tax liabilities from the affluent group—$11.3 billion out of a total of $21.6 billion, or 52 percent. This feature is considered separately, however, because the effect of such a change is spread widely across income classes (with the exceptions of those earning less than $5,000 and those earning $500,000 or over). The rate advantage of income-splitting seems better considered therefore as a 50-50 measure—that is, half of the increase would be paid by the affluent (actually 52.4 percent) and half by those in middle-income brackets (47.6 percent).

Potential economic effects. If the three reforms that most affect the liability of the upper income group were carried out strictly as proposed by Pechman and Okner, a maximum of $20.3 billion could be anticipated in increased tax collections. George Break[1] and others, however, have noted several reasons why the steps contemplated by these proposals might very well yield less than this amount.

The most obvious reason to discount the $20.3 billion estimate, is that Congress has failed to enact these reform proposals in the past, although this does not mean that their time will not come.

Break mentions several additional reasons why the $20.3 billion figure might not be achieved. Full taxation of capital gains might severely restrict sales of capital assets, in which case lower rates at the top of the income scale might be considered necessary. Furthermore, if capital gains on corporate shares were taxed at higher rates and the $100 dividend exclusion eliminated, the issue of double taxation of corporate income might trigger demands for corporate tax relief.

Taxation of State and local bond interest and the elimination of the deduction of State-local sales and property taxes would probably stimulate demands for other forms of Federal financial aid to State and local governments to compensate them for their lost fiscal advantage.

The move back toward original cost depreciation and depletion would have the effect of raising U.S. corporate tax rates relative to those in other nations and thus would draw opposition from the business community. Similarly, powerful interest groups could be expected to oppose removal of the present depletion allowances for oil and gas and tightening the charitable contribution deduction (to amounts exceeding 3 percent of AGI) on the grounds that the national interest in these areas would be adversely affected.

Middle-income class. The principal impact of a second group of reform features would be on the middle-income class. The measures falling in this group are:

- Taxation of life insurance interest, which would add $2.7 billion in tax revenues, $2.0 billion from those earning between $5,000 and $25,000;
- Removal of homeowners' preferences, a $9.6 billion addition in Federal income tax revenues, $5.8 billion coming from the middle income class;
- Taxation of transfer payments (social security and railroad retirement, public assistance, workman's compensation, unemployment insurance and veterans' disability compensation) as ordinary income with $13.1 billion added to Federal revenues, $10.3 billion from the $5,000 to $25,000 income class;
- Removal of the percentage standard deduction, which would add $7.1 billion to tax revenues, $5.7 billion from the middle-income group; and
- Elimination of the aged and blindness exemptions, a reform that would raise $2.9 billion in tax revenues, $2.0 billion from the $5,000 to $25,000 income class.

Taken together, these five reforms would raise an additional $35.4 billion, $26.0 billion or 73.4 percent from those earning $5,000 to $25,000 a year.

Potential economic effects. Since the greatest amount of the expanded tax base for these proposed reforms is concentrated in the middle income-class, it is quite possible that lower tax rates for this group would be the price to be paid for expanding the tax base. If such were the case, and political realism would seem to indicate this is at least an active possibility, then the accompanying rate-lowering could cut into the expanded tax collections to a considerable extent. The additional revenues, on a net basis, therefore, may not be very large.

One of the proposed reforms—to tax imputed rents for owner-occupied houses—technically is quite complex. Although imputed values conceivably could be constructed, they are not generally considered a desirable feature of a tax base. At a minimum, inclusion of imputed rent would add to the complexity of administering the income tax. Indeed, to date, this reform has generated minimal political appeal.

Low-income class. The low-income class would bear very little of the increased tax payments that would result from any of the revisions necessary to achieve the comprehensive tax base. Most of the additional tax payments from this group would come from removing the aged and blindness exemption and to a lesser extent, taxing transfer payments.

Whatever appeal these two reform proposals may have would seemingly be reduced because of their impact on the low income class. Currently, the general position of the Federal government—as well as State and local governments—is to assist this group. Increased tax liabilities for this income group, therefore, would be inconsistent with existing governmental policy. If Federal financial assistance were increased, then the additional revenues stemming from these proposals would be diluted from projected revenues.

The Brookings Proposals

The Brookings Institution in its study, *Setting National Priorities the 1973 Budget,* also addresses the question of structural reform of the income tax. Unlike the Pechman and Okner research, however, the Brookings analysis is not concerned with measuring the extent of erosion in the personal income tax. Rather, it considers three tax reform packages and how each affects the effective rate of income tax paid by individuals at different levels of income.

Of the three reform packages, the most extensive yields a total amount closest to the proposed figure to replace local property taxes for schools—that is, $10.2 billion. *(See Table 19.)*

This extensive list of reform provisions undoubtedly would generate considerable political debate. Upper-income groups would object because the reforms raise additional tax revenues, largely at their expense. The changes called for by this package leave the liabilities of the low- and middle-income taxpayers relatively unchanged. There are, however, two exceptions to this statement—the elimination of the deduction of gasoline taxes ($0.5 billion additional revenues) and the elimination of the real estate property tax deduction ($2.3 billion added revenue yield).

Most of the reforms contained in the Brookings proposal do not affect corporations. Those that did would increase corporate liabilities by approximately $3.2 billion—$800 million from eliminating the alternative tax on long-term capital gains, $400 million from removal of half the excess depletion advantages, and $2.0 billion from the revision of the tax on preference income.

For all income classes, the Brookings proposal would raise the effective rate of income tax by 1.1 percentage points, from its current level of 11.0 percent. *(See Table 20.)* Among income classes, the effect is slight through the $50,000 level. Indeed, the increase is only 1.2 percentage points for the $25,000 to $50,000 income class. Beyond this level, the increase in effective rates steepens—particularly for those earning over $500,000.

Income Tax Rate Increases

Increased individual income tax rates offer a second option for raising substantial additional tax revenues for the Federal Government.

Because of its relatively broad base—which would not be changed by this approach—large amounts of additional revenue could result

Table 19—Revenue Effect of Individual Income Tax Reforms, 1972

Reform Provision	Revenue Effect (in billions)
1. Remove maximum tax on earned income	$ 0.1
2. Include 60 percent of realized capital gains in adjusted gross income and remove alternative capital gains tax provision	1.5
3. Eliminate deduction of gasoline taxes	0.5
4. Eliminate deduction of real estate property taxes	2.3
5. Remove dividend exclusion	0.4
6. Eliminate 50 percent of excess depletion advantages	0.2
7. Place a 3 percent floor on charitable contribution deductions	1.9
8. Tax unrealized capital gains in excess of $5,000 transferred by gift or bequest at capital gains rates	0.6
9. Remove $25,000 exemption allowed for excess investment interest deduction	1.2
10. Revise preference income tax base[1] and tax at one-half the regular income tax rates[2]	2.4
11. Total revenue effect[3]	$10.2

Source: Charles L. Schultze, Edward R. Fried, Alice M. Rivlin and Nancy H. Teeters, *Setting National Priorities, the 1973 Budget,* The Brookings Institution, Washington, D.C., p. 433.

[1]Revision of the preference income base involves inclusion of State-local bond interest as a preference item and removal of the deduction for current-year taxes paid.
[2]Tax the revised base at 7 percent to 35 percent.
[3]The total is not equal to the sum of the components because various provisions interact with one another.

Table 20—Current Effective Individual Income Tax Rates and Rate Increases Under the $10.2 Billion Brookings Proposal, by Income Class, 1972 Income Levels

Income Class (in thousands)	Effective Rate, Current Law (in percent)	Increase in Effective Rate from Reforms (in percent)
0 to 3	0.5	0.3
3 to 5	1.7	0.1
5 to 10	5.1	0.2
10 to 15	8.6	0.4
15 to 20	10.5	0.6
20 to 25	11.8	0.7
25 to 50	13.9	1.2
50 to 100	22.2	3.0
100 to 500	31.0	8.4
500 to 1,000	32.8	16.3
1,000 and over	34.2	19.0
All classes[1]	11.0	1.1

Source: Charles L. Schultze, Edward R. Fried, Alice M. Rivlin, Nancy H. Teeters, *Setting National Priorities, the 1973 Budget,* Brookings Institution, Washington, D.C., p. 434.

[1]Includes negative income class not shown separately.

from modest increases in personal income tax rates.

Rate increases can be accomplished in essentially two ways. The more familiar and certainly the most recent method is the surcharge—to increase all tax liabilities by a certain percentage. The surcharge, if levied at 10 percent—as it initially was during the Vietnam War—would require those with current tax liabilities of $5,000 to increase their tax payments to $5,500.

A second approach would raise all existing tax rates by a given number of percentage points. This percentage point increase then would raise tax rates equally throughout the income spectrum. If two percentage points were adopted as the desired increase, tax rates would rise from 14 percent to 16 percent at the low end of the scale and from 70 percent to 72 percent at the upper end of the income distribution.

To raise $12 billion in additional income tax revenue would require either an 11.8 percent surcharge or a 2.5 percentage point increase. The critical difference between these two approaches—and indeed between rate increases and tax reform— is the effect on the progressivity of the income tax burden. The increase in effective rates via each approach—tax reform, percentage point increase, and surcharge increase—have been calculated by the Brookings Institution. Taxes were taken as a percent of income, where income is the sum of adjusted gross income, transfer payments, State and local government bond interest and excluded realized long-term capital gains. Two points deserve emphasis:

1. The tax reform approach is the most progressive way of raising the necessary additional Federal revenues. For all income classes between the $3,000-to-$5,000 group and the $20,000 to $25,000-income group, the increase in effective rates is least if the base-broadening method is adopted. For all income classes $50,000 and over, the increase in effective rates is greatest via the tax reform procedures. *(See Table 21.)*

2. The tax surcharge method, while less progressive than the tax reform approach, is more progressive than the percentage point increase method. For all income classes below $25,000 the surcharge raises effective rates by lesser amounts than the percentage point procedure (though the differences are not great). For all income classes above $25,000 the income tax surcharge raises effective rates by more than the percentage point increase, particularly for the $100,000 and over group.

Table 21—Current Effective Individual Income Tax Rates and Rate Increases Under Alternative Methods of Raising Additional Federal Tax Revenues, by Income Class

		Increase in Effective Rate		
Income Class (in thousands)	Effective Rate, Current Law	$10 Billion Tax Reform Approach	$12 Billion Income Tax Surcharge	Tax Increase—Percentage Point Increase
0- 3	0.5	0.3	0.1	0.1
3- 5	1.7	0.1	0.2	0.3
5- 10	5.1	0.2	0.6	0.8
10- 15	8.6	0.4	1.0	1.2
15- 20	10.5	0.6	1.3	1.5
20- 25	11.8	0.7	1.4	1.6
25- 50	13.9	1.2	1.7	1.6
50- 100	22.2	3.0	2.6	1.8
100- 500	31.0	8.4	3.5	1.6
500-1,000	32.8	16.3	3.9	1.3
1,000 and Over	34.2	19.0	4.1	1.3
All Classes	11.0	1.1	1.3	1.3

Source: Charles L. Schultze, Edward R. Fried, Alice M. Rivlin, Nancy H. Teeters, *Setting National Priorities, the 1973 Budget*, Brookings Institution, p. 441.

The difference between the two rate increase procedures is most pronounced for those individuals—approximately 1 percent of families—whose incomes exceed the $35,000 level.

Estate and Gift Taxation

Although the present Federal estate tax is over 50 years old, a quarter of a century has gone by since Congress has looked at it even perfunctorily. At that time (1948), it reduced the estate and gift taxes payable by married people in non-community property states. Statutory tax rates and exemptions have remained unchanged for 30 years.

Legislative neglect of these taxes ought to be corrected. In a nation with the world's largest accumulation of private wealth, where the number of millionaires grows by the score year after year, taxes on the transfer of private wealth could contribute substantial revenue, particularly at a time of increasing tax burdens on people with low and moderate incomes.

The structure of these taxes is shot through with provisions that result in unequal treatment of citizens in substantially equal circumstances. Tax payments depend as much or more on how and when their property is distributed as on the aggregate amount distributed.

This is the one progressive tax, other than the personal income tax, because it could be designed to fall with increasing weight as tax paying ability increases. Those who distribute large amounts of property during life must have unusual ability if they are able to part with it. Those who receive property also have special tax paying ability as they come into possession without any particular effort of their own.

Moreover, the estate tax could complement the income tax, compensating for the latter's failure to tax some types of income, as for example, tax-free interest and unrealized capital gains. Yet, while accumulation of private wealth here is on a scale unmatched anywhere in the world, taxes imposed in connection with the passing of that wealth to the next generation account for barely 2 percent of tax revenues.

The view that these taxes merit priority attention in the quest for more Federal revenue is not uncontested, however. Those opposed to more effective property transfer taxation raise a number of objections. They point out that nowhere is it a significant revenue producer. Even in the United Kingdom where the aggregate tax burden is substantially heavier than here, death duties produce less than 3 percent of tax revenues.

Critics stress that, compared to the personal income tax, estate and gift taxes do not play much of a progressive role in the American tax system. The income tax, however, is also vulnerable on this score. Although the income tax accounts for around 45 percent of Federal tax revenues, that portion of tax collections produced by rate graduation (rates above the first bracket) accounted for only 7 percent of the 45 percent in 1970.

The passage of time has tended to increase the weight of these taxes automatically. If estate and gift tax exemptions were appropriate when established 30 years ago, so the argument runs, they must be grossly inadequate now as price increases have reduced their value in real terms by more than half. The same may be said for the lower brackets of progressive rate schedules designed to limit the tax-take from modest amounts of inherited wealth.

Some believe that as now structured, these taxes are too capricious to support more revenue weight. They argue that consideration of increasing their contribution to tax revenues should be deferred until the tax structure is corrected. By this approach the tax-take from a given amount of property left to one's heir would not be affected to a major degree by variables such as the kind of assets that make up the estate, differences in business and family circumstances, whether the person dies young or lives to a ripe old age, and the degree to which he was familiar with the opportunities for minimizing transfer taxes and took advantage of those opportunities before he died.

Critics of heavier taxation emphasize also that reasonable people disagree about the purpose of these taxes.[2] Some believe the purpose of these taxes is to reduce concentration of wealth; some that their purpose is to tax windfalls; and some that the objective is to tax property accumulations at least once every generation. Others support estate and gift taxation on the ground that private wealth accumulation and its maintenance are made possible in good part because government creates and protects

the economic and social structure within which such assets are amassed. In the critics view, estate and gift tax revision should await the development of a consensus about the purpose of these taxes because some of the objectives sought are not mutually compatible.

More effective taxation of inherited wealth evokes little enthusiasm among either the general public or government officials. The American "work ethic" applauds personal financial success and believes it only fair for those who succeed to pass the fruits of their success undiminished by taxes to their children and grandchildren. Some see unfairness in imposing a tax when a family head dies since those he leaves behind suffer grief and probably experience a reduction in income. Some believe present taxes on inherited wealth to be overly high already, perhaps reflecting a confusion of nominal and effective tax rates or a lingering hope that eventually they too will strike it rich.

Those concerned with quality taxation have been urging a close look at this tax area for decades and on occasion have been seconded by both executive and legislative leadership only to see the subject passed over again and again. A number of circumstances may explain this. The subject tends to come to the fore mainly when there is urgent need for more revenue. At such times, however, estate and gift taxes are the first to be pushed to the back because they pose complex issues which can be fully explored only in the absence of time pressures. At such times, too, there is a disposition to by-pass increases in these taxes on the ground that it would be unfair to penalize those who chance to die during a revenue emergency. A cynical view, however, notes that those in political leadership positions are likely to be men of means and advanced in years.

Clearly the complexities of the subject tend to intimidate legislative committees with heavy workloads. Comprehensive estate and gift tax reforms were developed by the Treasury Department during the Johnson Administration and delivered to the House Committee on Ways and Means and the Senate Committee on Finance (at their request) by the Nixon Administration four years ago. They have not yet been scheduled for committee consideration.

The case for moving with more caution in this tax area than in almost any other can not be denied. The arrangements people make for the disposition of their wealth is generally a once-in-a-lifetime affair. Practitioners in estate planning say that people tend to shy away from the task, tend to defer it as long as they date. Tax considerations no doubt play some part in the arrangements they ultimately make. Legislators are understandably reluctant to alter tax provisions that may disturb these arrangements and require changes in wills, trust provisions, etc.

Legislators also tend to avoid major structural changes in property transfer taxation because such changes are likely to involve some actual revenue losses in the short-run. They shun retroactive increases on property distributions already completed and try to avoid disturbing distribution plans previously made. Difficulties emerge because most proposals for reform would require the taxpayer to cumulate his lifetime property transfers. Retroactivity is most readily assured by beginning cumulation anew when an entirely new method of taxation is presented. Several of the changes proposed in the Treasury Department's 1969 tax reform package, for example, involve revenue losses in the initial years.

Taxes on Transfers of Property

The United States property transfer tax system includes Federal and State estate and gift taxes and State inheritance taxes.* Local governments are involved only in very few States where they participate in State tax enforcement and share in State collections.

The principal component of the system is the Federal estate tax—an excise levied on the right to bequeath property at death. It applies to the local estate left by the decedent after a variety of exemptions, deductions, and exclusions, and is imposed at graduated rates.

The present Federal tax was enacted originally in 1916 and increased twice during World War I. It was reduced in 1918 and again in 1926 but subsequently was increased on five different occasions, most recently during World War II (1941).

The Federal government had levied death

*The collective term for estate and inheritance taxes is death taxes; for death and gift taxes, transfer taxes.

taxes on several occasions before 1916 (1798, 1861 and 1898). These were inheritance taxes (i.e., on the separate share of each beneficiary) imposed as temporary measures to meet emergency revenue needs.

State death taxation already had a long history when the present Federal estate tax was enacted. In Pennsylvania, that history dates from 1825. Several States followed Pennsylvania's example but after the Civil War these taxes fell into disuse. By 1885 only two or three States were making noteworthy use of them. That year, however, New York moved into the field and after the turn of the century, Wisconsin pioneered a graduated tax with centralized tax administration. Other States followed, and by 1916 all but five States had adopted some form of death taxation.[3]

The prevalent State tax on inherited wealth is the inheritance tax which, unlike the estate tax, is levied on the beneficiaries of the estate —on their privilege to inherit property. Each heir is treated as a separate taxpayer and allowed a separate exemption. The amount of that exemption varies, as do the applicable tax rates, with the relationship of the heir to the decedent. Generally, the closer that relationship, the higher the exemption and the lower the tax rate.

States also make some use of estate taxes, the simplest of which is the "pick-up" tax. Because the Federal government allows a limited amount of inheritance and estate taxes paid to the States as a credit against its estate tax, five States follow the simple route of imposing an estate tax "equal to the maximum" allowable credit against the Federal estate tax. Others employ independently designed estate taxes. Thirty-two States rely principally on inheritance taxes and then add a catch-all "pick-up" tax in case their basic tax falls short of the maximum credit allowed against the Federal tax. Since State taxes on inherited wealth (particularly in the lower brackets) generally exceed the allowable off-set, these catch-all estate taxes come into play mostly on large estates.

The third tax in the property transfer tax system is the gift tax. It was invented to reinforce the first two since taxes assessed at death could be avoided by transferring property through *inter vivos* gifts (among the living). The Federal gift tax was originally adopted in 1924 and repealed in 1926. It was enacted anew in 1932 and since has remained an integral component of the Federal transfer tax system. The Federal gift tax is the liability of the person who makes the gift and for this purpose a running record is kept of all unexempted gifts he has made during his lifetime subsequent to the 1932 enactment of the gift tax.* The tax payable each year is equal to the tax on the aggregate of all gifts (in excess of allowable exemptions) made since 1932, less the amount of the tax on the aggregate gifts made before the current taxable year. In determining the amount of the credit for gifts taxed in prior years, the calculation is based on tax rates in effect during the current year. This insures that donors are not penalized (taxed retroactively) on gifts made before 1942 when gift tax rates were lower.

The gift tax has not spread to most States; only 13 use it. The others ignore it because it would not produce appreciable amounts of revenue and is difficult to enforce at the State level. Assets, particularly securities, can be kept outside of the home State beyond the view of that State's tax administration.[4]

Revenue Productivity

Although Federal estate and gift tax rates have not been changed since 1942, their revenue contribution has increased from slightly more than a half billion dollars at the close of World War II to $1.6 billion in 1960, $3.6 billion in 1970, and $5.4 billion (preliminary) in 1972 (this latter figure reflects in part a "speed-up" of collections resulting from P.L. 91-614). The States' collections from inheritance, estate, and gift taxes have followed a similar pattern. They increased from less than $150 million in 1946 to over $300 million by 1956, almost $1 billion by 1970, and currently are estimated around $1.2 billion.

Growth in the value of taxable estates, produced by rising real estate and security prices and increases in the number of wealthy persons, has enabled these taxes to maintain their relative (albeit small) contribution to tax

*Gifts of $3,000 or less a year to each of an unlimited number of donees are exempted. In addition a lifetime donor exemption of $30,000 is allowed. For married couples these exemptions in effect are doubled.

Table 22—The Significance of Death and Gift Taxes, Selected Years (amounts in millions)

	STATE			FEDERAL			STATE AND FEDERAL		
Fiscal Year	Death & Gift Taxes	Total State Taxes	Death & Gift Taxes as % of Total Taxes	Death & Gift Taxes	Total Federal Taxes	Death & Gift Taxes as % of Total Federal Taxes	Death & Gift Taxes	Total Taxes	Death & Gift Taxes as % of Total Taxes
1940	$ 113	$ 3,313	3.4%	$ 357	$ 4,878	7.3%	$ 460	$ 8,191	5.6%
1946	141	4,937	2.9	669	36,286	1.8	810	41,223	5.0
1952	211	9,857	2.1	818	59,744	1.4	1,029	69,601	1.5
1958	351	14,919	2.4	1,393	68,007	2.0	1,744	82,926	2.1
1964	658	24,243	2.7	2,394	90,507	2.6	3,052	114,750	2.7
1970	996	47,962	2.1	3,644	146,082	2.5	4,640	194,044	2.4
1971	1,104	51,541	2.1	3,735	137,277	2.7	4,839	188,318	2.6
1972est	1,542	59,940	2.6	5,412	151,043	3.6	6,954	210,983	3.3
1973est	1,221	68,339	1.8	4,300	155,000	2.8	5,521	223,339	2.5

SOURCE: Census Publications except 1972 and 1973 Federal from Treasury Bulletin and 1972 and 1973 State from ACIR staff estimates.

revenues without increases in their rates. In recent years, they have accounted for about 2 percent or 2.5 percent of tax collections at both the Federal and the State-local level. *(See Table 22.)*

No firm guidelines exist for gauging the adequacy of the contribution of these taxes to revenues. In 1971, when the Federal estate and gift taxes produced $3.6 billion, the alcoholic beverage taxes produced $4.8 billion, the tobacco taxes $2.2 billion, and the automotive excises (gasoline, motor vehicle, parts, tires, etc.) $7.3 billion.

At the State-local level that year, inheritance, estate and gift tax collections of $1.1 billion compared with $17.8 billion produced by general sales taxes, $6.7 billion by motor fuel taxes, $1.6 billion by alcoholic beverage taxes, and $2.7 billion by tobacco taxes.

These data on present collections from property transfer taxes suggest that the potential for additional revenue from this tax area is relatively small.

Federal-State Tax Relations

The question of whether and how to increase the revenue producing capability of Federal taxes on inherited wealth necessarily involves the consideration of Federal-State tax relations.

The States lay a prior claim to this tax area both because they preceded the Federal government in the field and because the basis for taxing property transfers involves legal ownership which is governed by State rather than Federal law. Congress recognized the States' claim to a share of this tax area in 1924 when, for the first time, it allowed a credit for taxes paid to States against Federal estate tax liability and, in 1926, when it increased that credit to 80 percent of Federal liability (calculated under the estate tax rates and exemptions in effect at that time). In recent years—the 1926 credit which is still in force—has equalled about 10 percent of the current Federal estate tax liabilities.*

The history of this Federal-State tax relationship was explored in depth in this Commission's first report: *Coordination of State and Federal Inheritance, Estate, and Gift Taxes,* (CA-1, 1961). The maximum share of the Federal estate tax liability that can be discharged with the credit for taxes paid to States has declined from near the 80 percent level to around 10 percent because when Federal estate tax rates were raised and exemptions reduced after 1926, taxes paid to States were not qualified for credit against the increases in Federal tax liabilities. Congress

*On estate tax returns filed during 1970, the estate tax liability (before tax credits) aggregated $3,416 million, and the credit for state death taxes $333 million. Department of the Treasury, *Statistics of Income, 1969: Estate Tax Returns,* p. 2.

elected to retain all of the increased tax collections for the U.S. Treasury. Spokesmen for the States have called this a breach of the spirit of the 1926 legislation that should be corrected by liberalizing the credit for taxes paid to States. This Commission associated itself with that viewpoint in its 1961 report.

An increase in the estate tax credit for taxes paid to States would cut into the contribution of the estate tax to Federal revenues unless it were timed to coincide with legislation that increased the revenue producing capability of the Federal tax. Indeed, during the 1960s, when this Commission sought Treasury Department support for Congressional implementation of its 1961 recommendations (with the concurrence of the then Secretary of the Treasury), that Department withheld its endorsement on the ground that the subject should be deferred until it could be considered in the context of comprehensive Federal tax reform.

It is possible that the recent enactment of Federal revenue sharing may help to reconcile the States to their reduced share in the taxation of inherited wealth, ultimately perhaps even to relinquishing this tax area to exclusive Federal taxation. There is at least some merit in the view that American fortunes are the fruits of business activity on a national and international scale; that it makes little sense to limit State taxation of that wealth to the one State in which the current holder of the title to that wealth happened to make his home when he died.*

Tax Exemptions and Tax Rates[5]

The Federal estate tax exemption is $60,000 and a return is required whenever the value of the gross estate exceeds $60,000 at the date of death. Under this provision about 134,000 tax returns were filed in 1970. The number of returns has more than doubled during the past ten years, reflecting the rise in the number of persons with substantial wealth accumulation and in the value of such assets as stock and real estate. However, nearly a third of estate tax returns filed proved to be nontaxable. This occurs because up to half of the gross estate may qualify for a deduction if left to the surviving spouse, and because deductions are allowed for charitable contributions, claims on the estate, expenses of administration, etc. Moreover, credits are allowed against tentative tax liability for taxes paid to States and foreign countries and prior Federal estate or gift taxes paid on assets included in the gross estate.

In 1970, the 134,000 returns represented a gross estate valuation of over $27 billion. However, deductions and exemptions left a taxable estate valuation of only $11.7 billion, resulting in an estate tax liability (after tax credits) of $3 billion.

The amount of privately owned wealth in the United States is not known. It has been variously estimated to be in the range of $2 trillion to $2.5 trillion. Thus, on the assumption of a 25 to 30 year generation span, the amount of private wealth included in taxable estate tax returns corresponds to between 12 percent and 17 percent of private wealth. The participants in the testamentary and gift transfer process constitute only 4 percent to 6 percent of the total U.S. population.[6] That estate and gift taxes touch only a small segment of the population is suggested also by death statistics. The number of estate tax returns filed in 1970 corresponded to about 7 percent of adult deaths in 1969. With the increase in private wealth, this percentage has risen from about 2.5 percent in 1954 to about 5.5 percent in 1965.[7] Apparently a very large proportion of private wealth is in the possession of individuals with modest assets.

Exploration of the possibilities for increasing the estate-gift tax productivity logically ought to

*For the record, it is noted that two members of this Commission expressed concern about continued State taxation of inherited wealth more than ten years ago. Mr. John Burton (New York) and Governor Hollings (South Carolina) expressed their reservations to the Commission's 1961 recommendations as follows:

> The information presented in this document makes it very clear that estates and gifts are not a very satisfactory object of State taxation. States cannot operate in the area effectively without the protective umbrella of the Federal tax credit and the amount of revenue involved is too small to justify duplicate tax administration and duplicate compliance burdens on taxpayers. In our search for less tax overlapping, less interstate competition, and more economical tax administration, we may want to give consideration to reserving estate and gift taxation for the Federal government and placing at the disposal of States other tax areas they can administer more economically and efficiently. However, I concur in these recommendations because in light of the history of this subject, they go about as far as appears practicable at this time. (ACIR, *Coordination* . . ., p. 14.)

involve considering exemption reductions and tax rate increases. Unhappily, no helpful criteria exist as guides. The effective rates of the present tax are not materially different from the Canadian counterpart but are substantially lower than those in the United Kingdom. Changes in the degree of progression in the rate scale involve highly subjective judgments which are best avoided. This perhaps explains why legislators sometimes increase income taxes through the medium of a percentage markup of tax liabilities under existing law. When this procedure is employed (as in the case of the recent 10 percent surtax) it is usually presented as a temporary increase to be repealed subsequently. In the case of estate taxes, however, the expedient of a temporary surtax would be criticized as unfair to the heirs of those who chance to die during the time interval when the surcharge is in effect.

On occasion, legislators avoid the issue of progression in rate graduation by raising each of the rates by a specific number of percentage points. This technique, however, holds only limited revenue significance for the estate tax. A one-point increase all along the rate schedule, for example from 5 percent to 6 percent on the first $5,000 and from 77 percent to 78 percent on the excess over 10 million, if in force with respect to returns filed in 1970, would have increased tax liabilities only by about $115 million.

Tax rate increases leave those not now taxable unaffected. A contribution from them could be obtained by reducing the exemption below $60,000. This, however, would add little to revenues because they would be taxable at the lowest rates in the tax rate schedule. A $10,000 reduction to $50,000, for example, would result in a maximum $500 tax liability on estates made taxable for the first time.

Apart from these considerations, the case for increasing the yield of taxes by reducing exemptions or increasing rates would encounter objections on equity grounds. As noted, the present estate and gift tax structure is widely criticized on the ground that it produces capricious tax results depending upon when and how property is transferred. To increase tax rates would serve only to exaggerate present inequities. It follows that the elimination of these sources of unfairness ought to precede changes in exemptions and rates.

Estate and Gift Tax Integration

The relatively low yield of the property transfer tax system, considering the amount of private wealth and the level of tax rates, is explained in part by the breaking up of the individual's wealth for tax purposes into separate pieces so that each portion has the benefit of a separate exemption, and of the low rates associated with the bottom tax brackets. One example is the separate taxation of estates and gifts, considered in this subsection.

The distribution of property during life removes that property from the donor's estate at death. The act results in substantial tax reductions depending upon the individual's total wealth, the amount of it he gives away during life, the number of beneficiaries he has, and the length of time over which he spreads his property distributions.

The gift tax, like the estate tax, has a specific exemption and uses a progressive rate structure. It applies to the cumulative total of lifetime gifts, without regard to the amount of property left to be bequeathed at death. Conversely, the estate tax at death applies its exemptions and rates without regard to the amount distributed during life.

Distributions during life can result in substantial tax savings. The donor has a lifetime gift tax exemption of $30,000 as does his wife if she is party to the giving, even where all property is in the husband's name. In addition, both spouses may distribute each year gifts of $3,000 each to any number of donees. In other words, these annual $3,000 donee exemptions permit a man and his wife to distribute tax-free each year $12,000 to two children, $30,000 to five children, etc. They may repeat this process year after year. Thus if they wish to remove $500,000 from their estate by gifts to five children, relatives, or friends, they can do so over a 15 year period without paying any tax at all by utilizing their combined lifetime $60,000 gift tax exemption and five annual $6,000 donee exemptions.) [(5 × $6,000 × 15) + $60,000 = $510,000.]

Moreover, although gift tax rates are graduated, they are one-fourth lower than those in the estate tax and when property is removed from the estate by distribution before death, it is in effect shifted from the top estate tax rate

that would apply in the absence of the *inter vivos* transfer to the bottom tax rate bracket of the gift tax. Finally, unlike the estate tax, the gift tax is computed on an amount that does not include the tax itself. The tax savings that can be achieved by distribution of wealth during life increase dramatically with the amount of property involved. If an individual dies with a $10 million estate, for example, the estate tax is more than $6 million, leaving his heirs less than $4 million. If, on the other hand, he elects to distribute his entire estate during his life, he can accomplish this by distributing $7 million, holding back approximately $3 million for gift taxes. In this way he increases the estate reaching his heirs, after tax, by $3 million or 75 percent. He can increase his heirs' net share still more by retaining about $500,000 for distribution after his death.

As would be expected, persons with modest wealth make little use of the tax bargain afforded by the gift tax. It is a bargain attractive chiefly to the rich. Surprisingly, however, even they avail themselves of the opportunity less than would be expected. Studies conducted by the Treasury Department reveal that the wealthy (those with estates of $1 million or more) transfer a little more than 10 percent of their total wealth during life; those with small estates (under $300,000) less than 3 percent.[8] More than half of the wealthy (52 percent) made use of this tax-saving opportunity compared with only 10 percent in the other group. Those with relatively modest estates are obliged to retain possession of their property until death to support themselves and their families or to continue their business activities. However, the amount of lifetime giving is surprisingly small even among the wealthy and does not appear to be increasing. Many apparently desire to retain possession of their property as long as possible, perhaps for business or family reasons, perhaps because they do not quite believe themselves vulnerable to death in the near future. In consequence of these variations in the pattern of property dispositions, the revenue loss incident to the present operation of separate gift and estate taxation may not be more important than the inequity that results from the fact that, for personal, business, or psychological reasons, the gift tax route to tax savings is not equally available to all; that in consequence, individuals with estates substantially equal in size are subjected to widely different tax liabilities.

The remedy widely proposed is the cumulation for tax purposes of property given away during life with that left for distribution at death. Two versions of this technique compete for support. Those who prefer estate taxes over inheritance taxes would cumulate to the donor, by treating the property he leaves at death as his last gift. Those, on the other hand, who prefer the inheritance route, would cumulate to the donee (as in an accession tax) by aggregating all of the taxable gifts he receives during his lifetime from all donors with his shares in all estates from which he benefits. Each approach poses problems and in the short run probably would involve a revenue loss.

Advocates of cumulation rest their case on the need to terminate the unequal treatment of taxpayers in substantially identical circumstances and on the desirability of eliminating the need for special rules to govern the distribution of property during life. Those opposed argue that it would tend to discourage gifts and therefore tend to preserve wealth concentration.

The case for the different methods of cumulation has been debated at length in the legal and economics professions, and little would be gained by detailing that debate here. The Treasury Department, after lengthy study and consideration of the findings of other groups (notably the Brooking Institution Conference and the American Law Institute Federal estate and gift tax project), concluded in favor of cumulation to the donor. It recommended unification of the estate and gift taxes into a single transfer tax. Lifetime gifts and transfers at death would be added together to determine the total wealth subject to transfer taxation. A single exemption and single rate schedule would be made applicable to that total; and the base of the gift tax would be grossed up to include the amount of tax, paralleling the treatment for estate taxes.

Estate and gift tax unification, as proposed by the Treasury Department, would involve an immediate revenue loss equal to 1 percent of current revenue (about $50 million at 1972 collection levels) because it would require starting gift tax cumulation anew. Ten years would elapse, according to Treasury estimates, before

the short-run loss would be replaced by a 5 percent revenue gain.[9]

Generation Skipping

One avowed objective of estate and gift taxation is to impose a tax when property passes from one generation to the next. Present law permits this objective to be vitiated in either of two ways. An individual can give or bequeath property directly to his grandchildren. Alternatively, he can place his property in trust either by gift or at his death.

The trust is a peculiarly Anglo-Saxon legal instrument for holding custody of property on behalf of an individual or an organization. The trust enables tax to be skipped by one or more generations because the enjoyment of property held in trust can pass from generation to generation while the title to the property continues to vest in the trust. A tax is imposed when the property is placed in trust and not levied again until it passes out of the trust although during the interim one or more generations may have enjoyment of it.

Noncharitable interest in a trust generally must vest not later than the last survivor among a reasonably small number of persons specified in advance and living when the trust is created, plus 21 years. This generally limits tax-free generation skipping to not more than two generations—from child to grandchild or from grandchild to the "remainderman." A tax is payable when the remainderman gives up the property to the next heir in accordance with the specifications of the individual who created the trust.

The tax savings opportunities afforded through the use of trust instruments are objectionable on several grounds, apart from loss of revenue. These opportunities are available principally to persons of great wealth. Data compiled by the Treasury Department indicate that the use of generation skipping trusts is about ten times as great among those leaving gross estates of $1 million or more than among those leaving less than $300,000. In estates of $2 million or more, almost all family trusts are of the generation skipping type. The availability of these tax saving opportunities encourages artificial property distribution patterns. Moreover, it places control of property in the hands of trustees who are obliged to manage it conservatively and to withhold it from risk investment. Finally, as already noted, it defeats the fundamental objective of taxing property as it passes to successive generations.

Although specialists in this highly specialized field of taxation are agreed that generation skipping results in tax inequities, they are not agreed on how the situation might be corrected. The remedy proposed by the Treasury Department in 1969 contemplated the imposition of a tax at the time enjoyment of the transferred wealth actually passed to each succeeding generation. A special tax would be imposed which would serve as a proxy for the tax that would have been applied if the property had paid estate tax successively through each generation. Trusts that have become irrevocable would not be affected.

The Treasury Department estimated that its proposed treatment would result in an initial increase of 2 percent in estate and gift tax revenues (about $100 million at 1972 tax collection levels), rising after ten years to 4 percent.

Transfer of Property Between Spouses

Since 1948, a married taxpayer has been permitted to leave up to half of his or her gross estate to the surviving spouse free of estate tax. In the case of gifts between spouses only half is subject to taxation. This legislation, in effect paralleling the introduction of income splitting into the income tax that year, was intended to correct an inequity that had prevailed between the community property States and the rest of the country. Property laws in community property States treat all property acquired by a married couple during their marriage (other than property inherited, etc.) as belonging equally to each spouse.

Congress had made an earlier effort (1942) to correct this situation. Before 1942 the Federal estate and gift taxes adhered to the community property rule: decedents in community property States were generally taxed on half of their estates while in noncommunity property States the husband was taxable on all property held in his name. The tax advantage enjoyed in community property States, particularly by wealthy families was very substantial since they were enabled to split their estates in half, each half benefiting from a specific exemption and the lower end of the rate schedule.

The World War II tax-rate increases aggravated the consequences of this disparate tax treatment. Several additional States reportedly were considering adoption of the community property principle in the interest of their wealthy residents. To equalize estate and gift taxes among the residents of all States, the Congress in 1942 legislated to disregard community property by making transfers of such property taxable to the spouse who earned it. Six years later, as noted above, Congress reversed itself by making the estate tax advantages of community property States available everywhere.

The 1948 legislation involved a significant revenue loss and was widely criticized at that time partly because the resultant tax savings were proportionately larger as the size of estates increased. Moreover, it did not completely succeed in producing equal tax treatment of married couples.

Those who support the direction of the 1948 legislation contend that most married couples regard themselves as single economic entities within which individual title to property is not significant; that shifts of property within these economic units, therefore, should be permitted without tax consequences. The advocates of this view would accomplish their objective by removing the present 50 percent limitation on the martial deduction, i.e. by completely exempting transfers between spouses.

The complete exemption of transfers between spouses would do no violence to the principle of taxing property transfers between generations, since husband and wife are of the same generation. It should be noted, however, that if the husband and wife are regarded as comprising a single economic unit, it follows that their separate estates ought to be cumulated for tax purposes: the estate of the second spouse to die added on top of the estate of the first decedent. This would equalize estate taxes paid by most, but not all, married couples. However, the complete exemption of transfers between spouses coupled with cumulation of their successive estates does not appear to have universal support. In its 1969 program, the Treasury recommended removing the 50 percent limitation on the marital deduction. It did not propose, however, the cumulation of the two spouses' estates. It estimated that the unlimited marital deduction without husband's cumulation would reduce estate and gift tax liability by 13 percent (about $650 million at 1972 tax collection levels), leveling off to about a 10 percent revenue loss over a ten year period.

Unrealized Capital Gains

The tax issue probably discussed more widely in connection with estate and gift taxation than all others combined is the tax-free ride afforded appreciation in the value of assets contained in the estates of decedents. In actuality, this is an income tax problem associated with the final income tax accounting on behalf of deceased persons. It is generally discussed, however, in the context of estate and gift taxation.

The income tax grants special tax treatment to appreciation in the value of securities, real estate and most other assets. Long term capital gains (on assets held one year or more) are taxable at preferential rates but only when such gains actually are realized. (Generally this means sold.) If the owner of the appreciated asset dies without having sold it. the appreciation goes untaxed and those who inherit take for their basis of that asset its value at the time of death. In this way the appreciation in value between the time a person acquires an asset and the time he dies escapes taxation forever.

If the individual disposes of the asset by gift, the appreciation also goes untaxed. In that event, however, the recipient takes over the donor's tax basis and the gain becomes taxable when he sells the asset. Should he retain it, however, and ultimately pass it on to his heirs, the gain would continue to remain untaxed. Nearly five years ago the Treasury Department estimated that in this way about $15 billion of capital gains escaped taxation annually. The amount is larger now.

This tax treatment has remained unchanged since the original enactment of the Federal estate tax in 1916. It was given scant consideration in the original enactment perhaps because the estate tax was thought of as a temporary revenue measure and because of a misapprehension that to tax the gains as if they were constructively realized upon death would be tantamount to double taxation. No double taxation would or can result. If a capital gains tax were paid on behalf of the decedent, his estate

would be reduced correspondingly. Since that part of an estate accumulated out of such sources as wages, salaries, business profits, interest, dividends, and rents was subject to income taxation, parity between the treatment of these sources of an estate and the increase in the value of assets held in the estate can be achieved only by taxing capital gains as if realization occurred (constructive realization) at the time of death.

An undesirable feature of the present tax-free treatment of capital gains on assets in an estate is the so-called "locked-in" effect. It encourages older persons to hold onto assets that have appreciated in value although they may have sound business reasons for selling them.

There is a widespread consensus that this practice should be discontinued and the Treasury Department so proposed in its 1969 tax reform package. More recently the subject surfaced during the 1972 presidential campaign.

Under the Treasury proposal constructive realization of capital gains at time of death would be limited to the appreciation that will occur after enactment of the legislation. Moreover, appreciation on assets passing to the surviving spouse and orphans, on assets held in small estates, and those consisting of personal and household effects would continue to be exempted. Even in this generous form taxation of the appreciation in asset value in estates of decedents would add an estimated $300 million at 1972 tax collection levels to present estate and gift tax revenues, rising over a ten year period to 23 percent.

Summing Up

Realistically *viewed* the potential of estate and gift taxes for additional revenue—particularly in the near future—is very limited. The qualification "realistically viewed" is important because practical tax changes in this area often are at variance with the theoretically correct or desirable treatment.

Taxation of the transfer of property by gift or at death poses complex equity problems at every turn because people's property arrangements are extremely varied and intricate. In the absence of matching detail and complexity in tax provisions, citizens would be vulnerable to unfair tax treatment. It follows that here is a tax area in which "quicky" tax legislation is not practical. On the contrary, substantive tax changes will require protracted discussion and debate. This may explain the reluctance of congressional committees to open the subject for consideration and the deferral year after year of widely discussed tax reform proposals.

It is evident also that the propriety of tapping this potential revenue source is not supported universally. Although large family fortunes and great inherited wealth generally evoke the image of taxpaying ability, all too many, even among the financially less fortunate, have some reservations about the propriety of compounding a family's sorrow on the occasion of the death of one of its members with a heavy tax exaction.

This tax area tends to be by-passed also because congressional committees are so often confronted with urgent revenue needs and estate tax changes are notoriously slow revenue producers. Legislative estate and gift tax changes are properly limited to prospective application to avoid penalizing those who have already made their estate arrangements on the basis of the existing tax provisions and are not free to unmake them. Moreover, estate tax returns are not due and estate taxes are not payable for a year or longer after death.

Reform of the estate and gift tax fields face truly formidable technical and political obstacles. Opposition to the taxation of the appreciation in the value of property at death, however, might be mitigated by adoption of a Federal-State cost sharing program of property tax relief designed to shield low-income elderly from excessive property tax burdens.

FOOTNOTES

[1]George F. Break, "Alternative Federal Revenue Sources: A View of Some Less Explored Possibilities," *National Tax Journal*, April 1972.

[2]See for example, the summary of the views expressed at a conference of experts assembled by the Brookings Institution in Carl S. Shoup, *Federal Estate and Gift Taxes*, Brookings Institution, Washington, D.C., 1966.

[3]For dates of adoption of state death and gift taxes, see ACIR, *State and Local Finances: Significant Features and Suggested Legislation*, 1972, p. 173.

[4]For a detailed analysis of State taxes on property transfers, see ACIR, *Coordination of State and Federal Inheritance, Estate, and Gift Taxes*, January 1961.

[5]Because of space and time limitations, the subsequent discussion of estate and gift tax revision alternatives is

limited to the principal features of these taxes without even token treatment of their more technical aspects. For more adequate treatment see Carl S. Shoup, *Federal Estate and Gift Taxes*, Brookings Institution, 1966; *Federal Estate and Gift Taxation: Recommendations Adopted by the American Law Institute and Reporters Studies*, American Law Institute, 1969; Committee on Ways and Means and Committee on Finance, *Tax Reform Studies and Proposals*, U.S. Treasury Dept., February 5, 1969; and Joseph A. Pechman, *Federal Tax Policy*, Norton & Co., 1971, Ch. 8 and Bibliographical Notes.

[6]Shoup, *Federal Estate and Gift Taxes*, Brookings Institution, 1966, p. 130.

[7]*Statistics of Income, 1969: Estate Tax Returns*, p. 1.

[8]Committee on Ways and Means and Committee on Finance, *Tax Reform Studies and Proposals*, U.S. Treasury Dept., February 5, 1969, p. 115.

[9]The source for these and subsequently cited revenue estimates is Committee on Ways and Means, etc., *Tax Reform Studies and Proposals* . . ., p. 44.

Chapter V

Sources of Additional Federal Revenues: A National Retail Sales Tax

Taxing consumption—rather than income—offers a second practical approach to raising substantial additional Federal tax revenues. To date, the Federal government has not relied on a general sales tax; it has confined itself to a series of selective excise taxes. General consumption taxes are, of course, used at the national level in other countries, though here only States and, to a lesser extent, local governments utilize this tax.

The Federal government has considered adopting a sales tax at various points in our history. The first occasion was during the Civil War period. The sales tax issue again became important in the post World War II years, as a reaction to the higher personal and corporate income taxes. In 1932, the sales tax was suggested to reduce the Federal deficit, but was soundly defeated by Congress. The tax was also proposed as a financial vehicle for the social security programs between 1935 and 1941 and for war finance in 1942, though the issue was never brought to a vote.[1]

In 1969-70, the Federal government raised $15.9 billion or 10.9 percent of its total tax revenues from taxes on selected products such as motor fuels, alcoholic beverages, tobacco products and public utilities; an additional $2.4 billion was raised by customs duties. State governments, in contrast, rely far more heavily on sales taxation, general and selective. They raised $14.2 billion in general sales and $13.1 billion in selective sales levies during 1969-1970, or some 56.8 percent of their total tax revenues. For local governments, the comparable figures are $2.0 billion in general sales and $1.1 billion in selective sales taxes; taken together, these taxes produced 7.9 percent of total local tax revenues.

If the Federal government were to seek additional tax revenues by means of consumption taxes, a variety of tax instruments could be used. For example, rates of existing excise taxes could be increased, or new items could be added to the list. In terms of broad-based consumption levies, the retail sales approach could be adopted as could the value-added tax—both of which would be new departures in Federal tax policy in this country.

The Retail Sales Tax

A retail sales tax is a tax imposed on transactions at the final stage in the production-distribution process; it is collected by retailers and based on the final retail selling price. It thus differs from the value-added tax—a tax collected at each stage in the production-distribution process and based on the amount of value added by each firm. As a tax on consumption, however, the economic arguments and equity considerations of a retail sales tax (applied to final consumer purchases only, and excluding producers' goods) essentially are similar to the arguments for and against the consumption type value-added tax. Indeed, in theory, the retail sales tax and the consumption value-added tax have essentially the same tax base; hence, equivalent rates of the two taxes would yield equivalent revenues.

As a theoretical standard, the retail sales tax should be applied to consumption of both goods and services to avoid discriminating against certain types of transactions. Further, all goods and services purchased for use in production should be excluded from the tax base to avoid "double taxation" or pyramiding the tax. In practice, however, the retail sales tax base as presently used by State and local governments deviates from these standards. Coverage of services, for example, is less inclusive than the standard would suggest, while coverage of goods and services utilized for production coverage is more extensive.

The treatment of services and producers' goods under the retail sales tax base constitute part of the potential difference with the value-added tax. The difference is only potential because the comparison is between the retail sales tax that has been exposed to political pressure for preferential tax treatment and the value-added tax that remains in the conceptual stage. Additionally, these two consumption-type taxes differ in their potential for coordination with existing State and local retail sales taxes. Each of these matters is discussed in the subsequent sections.

Taxation of Services

Reasons for Taxing Services

Extension of the retail sales tax base to the service sector has long been advocated by a number of economists and public officials for various reasons. Conceptually, services that satisfy a consumer desire are no different than a material good that accomplishes the same

objective. If the sales tax is to be a general levy, it should include the service sector. The failure to tax services destroys the neutrality of a consumption tax because it arbitrarily leaves the price of untaxed items compared to the price of taxable commodities.

Including services in the tax base has several practical advantages. It expands the tax base, thereby permitting a lower rate to raise a given revenue yield. How much more productive the levy becomes depends on how comprehensively the service sector is taxed. For example, Iowa extended the sales tax to 59 services and produced an added $24 million in revenues, though initial estimates were as high as $30 million.[2] For California, a 20 percent increase in revenue yield has been estimated if selected services are included in the retail sales tax base.[3] More generally, Professor Due concludes:

> "There remains a category of services rendered primarily by commercial establishments that can be and to some extent is taxed. But miracles cannot be expected: the yield is not likely to be increased by more than 10% and the tax is not likely to be made progressive; the type of service the taxation of which would add to progressivity is exactly the type that cannot be reached . . .[4]

Although inclusion of services in the sales tax base may not transform this tax into a progressive levy, there are persuasive reasons for thinking such a policy decision would at least reduce the regressivity of this tax source and make it more responsive to economic growth. A retail sales tax keyed into the service area reaches one of the more dynamic growth sectors of consumer preferences. This appears to be borne out by the Hawaiian experience where services are taxed quite comprehensively. In fact, the proportion of general excise tax collections accounted for by the service component has risen steadily—from 30.9 percent of total 1959 collections to 42.4 percent in 1969.[5]

The inclusion of services in the base of the tax, however, can lead to administrative complexities. For example, experience in Iowa revealed serious problems related to the interpretation of the coverage of various services. Questions of interpretation required regulations and judicial rulings and resulted in delays of actual collections. While the Iowa evidence may reflect, at least in part, the problems of a vaguely drawn statute, it seems that taxation of services would add to the tax roll a number of relatively small taxpayers whose bookkeeping and accounting records may be less than fully adequate. In some instances, however, taxation of services may actually reduce the cost of tax administration. If firms provide both services and commodities but the tax applies only to commodities, the firms must separate the service component from the price of the item—an attempt that can prove time-consuming and costly to both the firm and the taxing jurisdiction. This procedure is eliminated when services are included in the tax base.

In sum, to include services in the tax base should make the retail sales tax more productive, more responsive to economic growth, less regressive, more neutral and, at least in certain cases, less costly to administer.

Actual Practice

The most exhaustive analysis of taxation of services is contained in *The Retail Sales Tax, An Appraisal of New Issues* by Daniel C. Morgan, Jr. That study, done in July 1963, employed six broad service classifications: personal services; repair, improvement and kindred workers' services; communications, transportation and other public services; amusement and recreation services; professional, technical and related services; and miscellaneous business services. These six classifications were further subdivided into various specific service industries totaling 112. Professor Morgan concluded that few States taxed services broadly and those that did made little attempt to exclude services rendered mainly to businesses. Professor Due, in his analysis of "New State Sales Taxes, 1961-68," states:

> The new States have moved gingerly into a relatively narrow range of services. Equity, revenue, and, if the coverage is properly designed, administrative considerations warrant taxing some services, those of a type rendered primarily to individual consumers by commercial establishments. Unfortunately some of the coverage of services is defective because of exceptions. A few States have nearly enacted legislation going too far in taxing services, by considering inclusion of a

Table 23—Taxation of Services Under State Sales Taxes, January, 1972*

	Alabama	Alaska	Arizona	Arkansas	California	Colorado	Georgia	Illinois	Kansas	Louisiana	Minnesota	Missouri	Nebraska	Nevada	New Mexico	New York	North Carolina	Ohio	Oklahoma	South Dakota	Tennessee	Texas	Utah	Virginia	Washington
Personal services																									
Barber shops	E	T	E	E	E	E	E	E	E	E	E	E	E	E	T	E	E	E	E	T	E	E	E	E	E
Hotel and motel rooms[a]	E[b]	T	T	T	T	T	T	E[b]	T	T	T[c]	T	T	E	T	T	T	T	T	T	T	E	T	T	T
Laundry and dry cleaning	E	T	E	E	E	E	E	E	T	T	E	E	E	E	T	E	T	E	E	T[d]	T	E	T	E	T
Restaurant meals	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
Rooming houses[e]	E	E	T	E	E	E	E[f]	E	E	E	E	E	E	E	T	E[f]	E	E	E	E	E[f]	E	E	E[f]	E
Shoe repair (labor)[g]	E	T	E	T	E	E	E	E	T	T	E	E	E	E	T	E	E	E	E	T	T	E	T	E	T
Shoe shining	E	T	E	T	E	E	E	E	T	T	E	E	E	E	T	E	E	E	E	T	T	E	T	E	T
Tailoring (repair)	E	T	E	E	E	E	E	E	T	T	E	E	E	E	T	E	E	E	E	T	T	E	T	E	T
Trailer camps (space rental)	E	T	T	E	E	E[h]	E	E	E	E	E	T	E	E	T	E	E	T	E	E	E[h]	E	T	T	T
Repair and improvement services																									
Automobile repair (labor)[g]	E	T	E	T	E	E	E	E	T	T	E	E	E	E	T	T	E	E	E	T	T	E	T	E	T
Car washes	E	T	E	T	E	E	E	E	T	T	E	E	E	E	T	T	E	E	E	T	T	E	T	E	T
Exterminating, residential	E	T	T	E	E	E	E	E	E	E	E	E	E	E	T	T	E	E	E	T	E	E	E	E	T
Communication, transportation, and other public services																									
Air transportation, passenger[i]	E	E	T	E	E	E	T	E	E	E	E	T	E	E	T	E	E	E	T	E	E	E	T	E	E
Bus service, passenger[i]	E	E	T[j]	E	E	E	T[k]	E	E	E	E	T	E	E	T	E	E	E	T	E	E	E	T[l]	E	E
Electricity, residential	E[b]	T	T	T	E	T	T	E[m]	T	E	T	T	T	E	T	T	E	E	T	T	E[n]	T	T	E	E
Gas, residential (by pipes)	E[b]	T	T	T	E	T	T	E[m]	T	E	T	T	T	E	E	T	E	E	T	T	E[n]	T	T	E	E
Railroad express service[i]	E	E	T	E	E	E	E	E	E	E	E	E	E	E	T	E	E	E	E	E	E	E	E	E	E
Taxi cab rides	E	T	T[j]	E	E	E	T	E	E	E	E	E	E	E	T	E	E	E	T	E	E	E	E	E	E
Telegraph[i]	E[b]	T	T	T	E	T	E	E[m]	T	E	E	T	T	E	T	T	E	E	T	T	T	E	T	E	E
Telephone[i]	E[b]	T	T	T	E	T	T	E[m]	T	E	T[o]	T	T	E	T	T	E	E	T	T	T	E	T	E	E
Trucking services, freight[i]	E	E	T[j]	E	E	E	E	E	E	E	E	E	E	E	T	E	E	E	E	E	E	E	E	E	E
Warehousing and storage	E	T	T	E	E	E	E	E	E	E	E	E	E	E	T	T	E	E	E	E	E	E	E	E	E
Water, residential (by pipe)	E[b]	T	T	T	E	E	E	E[m]	T	E	T	T	T	E	T	E	E	E	E	T	T	E	E	E	E

	Alabama	Alaska	Arizona	Arkansas	California	Colorado	Georgia	Illinois	Kansas	Louisiana	Minnesota	Missouri	Nebraska	Nevada	New Mexico	New York	North Carolina	Ohio	Oklahoma	South Dakota	Tennessee	Texas	Utah	Virginia	Washington
Amusement and recreation																									
Athletic contests, professional	T	T	T	T	E	E	T	E	T	T	T	T	T	E	T	T	E	E	T	T	E	E[p]	T	E	E
Bowling alleys	T	T	T	T	E	E	T	E	T	T	T	E	T	E	T	E	E	E	T	T	E	E[p]	E	E	T
Juke boxes	T	T	T	T	E	E	T	E	T	T	T	E	E	E	T	E	E	E	T	T	E	E	E	E	E
Movie theatres	T	T	T	T	E	E	T	E	T	T	T	T	T	E	T	E	E	E	T	T	E	E[p]	T	E	E
Race tracks	T	T	T	T	E	E	T	E	T	T	T	T	T	E	T	E	E	E	T	T	E	E[p]	T	E	E
Ski lifts	T	T	T	T	E	E	T	E	T	T	T	E	T	E	T	E	E	E	T	T	E	E[p]	T	E	T
Professional and technical services																									
Morticians' services[g]	E	E	E	E	E	E	E	E	E	E	E	E	E	E	T	E	T[q]	T[r]	E	E	E	E	E	E	E[s]
Photography, custom	T	T	T	T	T	T	T	E	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
Printing, custom	T	T	T	T	T	T	T	E	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
Business and miscellaneous services																									
Advertising agency services	E	E	T	E	E	E	E	E	E	E	E	E	E	E	T	E	E	E	E	E	E	E	E	E	E
Advertising space, newspaper	E	E	T	E	E	E	E	E	E	E	E	E	E	E	T	E	E	E	E	E	E	E	E	E	E
Automobile rental	E[b]	T	T	T	T	T	T	E	T	T	T	T	T	T	T	T	E[t]	T	T	E	T	T	T	E	T
Linen services	E[b]	T	T	E	E	E	T	E	T	T	E	T	E	E	T	E	T	E	E	T	T	T	T	T	T
Parking and garage rental	E[u]	T	T	E	E	E	E	E	E	T	E	E	E	E	T	E	E	E	T	E	T	E	E	E	T[v]
Tool rental	E[b]	T	T	T	T	T	T	E	T	T	T	T	T	T	T	T	T	T	T	E	T	T	T	T	T

T—Taxable E—Exempt

Source: CCH State Tax Reporter and State revenue departments.

FOOTNOTES

*For the State of Alaska, the listing refers to the City of Fairbanks retail sales tax.
[a]For continuous rental of less than thirty days.
[b]Taxed under separate State tax; no local tax.
[c]Exempt under Duluth city sales tax; Duluth has separate hotel-motel excise.
[d]Coin-operated exempt.
[e]Over one month continuous residence, except where noted.
[f]Ninety days or more.
[g]If charges or billed separately (such items of labor may or may not be taxable if not billed separately).
[h]Long-term continuous rental only; overnight or short-term rental is taxable.
[i]Intrastate service only.
[j]Where the bus, taxi cab, or trucking services are registered as common carriers and are paying the carrier tax to the Highway Department, an exemption is provided under the sales tax.
[k]Private companies only; municipal bus lines exempt.
[l]Interurban lines only; intraurban lines exempt.
[m]Taxable under optional municipal utilities tax.
[n]Subject to State but not local tax.
[o]Coin phones exempt.
[p]Subject to State amusement tax.
[q]First $150 exempt.
[r]Professional services must be included in complete funeral charge, of which fifty percent is taxable.
[s]Fifty percent of a lump-sum funeral charge is considered to be for the casket and is subject to tax. Other property sold must be billed separately and is taxable.
[t]Subject to State sales tax at reduced rate and exempt from county sales taxes.
[u]Except at places of amusement, where parking is taxable.
[v]Less than one-month only; long-term parking exempt.

> number of services rendered primarily to business firms. Taxation of such services is contrary to the philosophy of a sales tax and will encourage firms to provide the services with their own employees instead of obtaining them from separate firms.
>
> The need for itemizing specific services to be taxed and lack of clear criteria for delineating coverage are obstacles to extension of the taxes to service.[6]

Similarly, Professor Schoeplein notes "the ten new sales tax States have not indicated any widespread taxation of services."[7]

To provide a more detailed study than Due and Schoeplein and a more current, though less exhaustive, survey than Professor Morgan, the tax status (as of January 1, 1972) of 38 specific services in 25 sales tax States was analyzed. The following conclusions emerge:

- Of the 38 services surveyed, only one, restaurant meals, was taxed in all the 25 States studied and only 15 additional services were taxed in as many as a majority of these States. Thus, most of the 38 services are excluded from the tax base in most of the States studied here.
- Only three of the 25 States surveyed revealed a fairly consistent pattern of including services in their tax base: Alaska, which taxed 34 of the 38 items; Arizona, 30; and New Mexico 37. States that usually include services in the tax base include Arkansas, 21; Kansas, 24; Louisiana, 20; Oklahoma, 20; South Dakota, 24; and Utah, 25. Thus only nine of the 25 States studied tax a majority or more of the specified services.
- Nine States generally exclude services from their tax base: Alabama, which taxed only 9 of the 38 selected items; California, 5; Illinois, 1; Nevada, 5; Ohio, 7; Texas, 7; and Virginia, 8.
- While in recent years States have moved toward greater inclusion of services in their tax bases, there have been some abandonments as well.
- The taxation of services does not conform to the standard of taxing services consumed by households and exempting those services purchased by businesses.
- For each of the 38 selected services there is some precedent for taxation in some State studied.

Although State retail sales taxes have been rather spottily applied to the service sector of the economy, it does not follow that a Federal retail sales tax would necessarily reproduce this haphazard experience. There is no obvious or inherent reason why coverage of the service sector should differ under a Federal retail sales or Federal value-added tax. Broad coverage of services of a type consumed by households and provided by commercial establishments appears warranted on economic and equity grounds, not only under State retail sales taxes but also under any possible Federal sales or value-added tax.

While there is no compelling reason to presume that inclusion of services necessarily will differ between the two taxes, there is some basis for the view that exclusion of services is less combersome under the retail sales tax than the consumption-type value-added levy. Services not provided by regularly established enterprises (such as those performed by gardeners and domestic servants, or by housing as measured by actual or imputed rental values) and services which involve consumption in a sense different from the usual meaning of the word, such as insurance premium payments and borrowing, are dubious condidates for inclusion in the base of either a Federal retail sales tax or a consumption-type value-added tax. Yet the complications of excluding such services are greater under the value-added approach because each such exclusion breaks the chain of connection established via the tax credit mechanism. It further requires separation of sales to and purchases from such groups by all business firms dealing with whatever sectors are exempt. John Due summarizes the issue of inclusion of services under both taxes:

> Other advantages claimed for the value-added form have no substance. One is the broader coverage claimed for the tax: application, for example, to services. But this can be done equally well with the retail sales tax. In practice, any effort to cover all services with the value-added tax would encounter the same objections as do attempts to include these services under a retail sales tax: there would be strong demand to exempt medical, dental, and hospital service; the lawyers would scream about taxing legal services; and taxation of value added by local transit systems would merely increase their deficits. Furthermore, when some services are excluded from a value-added tax or other exemptions made, the complications created are far greater than those

created by exemption from a retail sales tax since the magic circle of the tax credit mechanism is broken.[8]

Taxation of Business Purchases

Including sales of producers' goods within the scope of the retail sales tax, or any consumption-type tax for that matter, is objectionable for several reasons. Taxing business purchases prevents a uniform tax burden on consumers because taxable producers' goods enter into costs of different products to varying degrees. One result is that some items are discriminated against, in a rather random fashion, and the allocation of economic resources is thereby altered. If, as is generally believed, a consumption tax of the retail sales or value-added type is shifted forward, then taxing producers' goods will enhance the likelihood of multiple taxation of the same item through the process of production. Imperfect and uncertain shifting can also take place if the firm buying taxed goods is competing with a firm that bought the same goods tax free. Further, taxing business purchases hinders the objective of exempting some consumption items from the tax base because the tax will apply to capital goods used in intermediate steps of production.

Actual Practice

Despite the economic justification for excluding producers' goods from the retail sales tax base, this standard has not been followed in actual practice. Although it is extremely difficult to generalize because of the many hybrid examples and the diversity within sub-classifications, States generally have pursued two approaches to exempt business purchases. One approach is the physical-ingredient or component part rule, under which an item is considered to be resold if it becomes a physical ingredient or component part of another good which is resold. Items such as machines, equipment, supplies and services not becoming a physical ingredient in the output of business firms are, however, included in the tax base. The second general approach to avoid taxing business purchases is the direct use or direct dissipation rule. This procedure excludes from the tax base a selected group of goods, supplies and equipment that, while not becoming an ingredient of the final product, are used directly in processing foods for sale.

For various reasons, however, States have not been totally successful in excluding producers' goods from the retail sales tax base. As Douglas Eldridge notes, "The States in varying degrees have necessarily sought revenues where they may be obtained with relative ease from larger firms, rather than rigorously following principles of economic neutrality and unifrom application of the tax only at the retail level."[9] John Due makes the same point:

> Unfortunately despite the economic justification for excluding producers' goods, there is strong opposition—from legislators who dislike the revenue losses, from groups who seek to place more tax on business and less on individuals, from administration officials who fear complications. But the case is nevertheless strong, and administration is feasible so long as the exemption is confined to major classes—materials, consumables, fuel, industrial machinery, farm machinery, and other major farm items.[10]

Various empirical studies substantiate these opinions. Due has estimated that between 10 and 20 percent of retail sales tax yields are accounted for by sales of producers goods by manufacturers and wholesalers.[11] A somewhat higher estimate has been made by Hickman, who attributed 30 percent of the California retail sales and use taxes to businessmen for purchases consumed in the course of their activity.[12] Professor Morgan has concluded:

> If a State employs a very strict component-part convention and grants no reduction in rates for business items taxed under that convention, the business portion will probably yield about a third of total receipts from the sales tax. If a State operates under a very liberal direct use convention, such as Ohio's, only 10 percent or so will come from the business portion. The percentage of total yield from the business portion for most States is apt to fall between 15 and 25 percent. . . . The total sales tax liability of business taken collectively may easily be halved by switching from a component convention to a direct-use convention. One convention is about as plausible as another from the standpoint of administration.[13]

States that adopted the retail sales tax after 1960 have generally enacted a more liberal exemption policy regarding business purchases. This has not, however, been accompanied by

a comparable movement among States that adopted the sales tax prior to 1960. Where the earlier taxes restricted the exclusion primarily to sales for resale, materials, and parts, the more recent enactments exempt the following additional producers' goods:

- industrial machinery used directly in production;
- industrial catalysts and consumables used directly in the production of tangible personal property;
- fuel and electricity for industrial use;
- farm feed, seed, fertilizer and livestock (all limit the exemption to purchases by farmers producing for the market and several to purchases for production of food);
- agricultural machinery and other items of equipment; and
- equipment and supplies sold to public utilities and public transport firms.

While these more recent sales tax exemptions indicate a greater willingness to exclude producers' goods from the tax base, the basic problem is that many items can be used both by consumers and by business. Presumably, States and the Federal government, with a systematic effort, could reduce the percentage of retail sales tax collected on business purchases down to the neighborhood of 10 to 15 percent. Thus, the vast majority of producers' goods could be excluded from a retail sales tax but it does not seem possible to exclude all such sales because of the dual uses—production and consumption—of many items. To exclude all articles sold for use by business or all sales made to such firms would inevitably exclude some articles also used by consumers.

Controversy surrounds the question of which type of consumption tax is more vulnerable to deliberate evasion as a result of diversion of purchases made by business for household consumption. The general opinion holds that diversion should be no more difficult to prevent under a retail sales tax than under a value-added tax. Under the retail sales tax, tax on sales to registered firms is suspended until the product is sold to a non-registered firm. To prevent fraudulent diversion, both taxes must rely on audit procedures. With the retail sales tax, a cross-check between vendor and vendee is necessary to assure that items purchased tax-free were actually used for business purposes. With the value-added tax, the auditor checks with the vendee who must produce invoices from his vendors. Hence, the general feeling is that there is no substantive difference between the two taxes and their procedures for detecting deliberate diversion.

Danish experience suggests that the value-added tax presents a somewhat greater deterrent to evasion than the retail sales tax. Tax officials in that country point out that it is easier to detect a would-be evader if the taxpayer must falsify his claim directly to the government—as in the case with the value-added tax—than if he merely has to give false information to a vendor who generally has little interest in the use made of items purchased from him—as the case with the retail sales tax.

The significance of this issue is, however, open to some question. As noted, both taxes require some checking. More important, if the value-added tax contains any exemptions for which rebates on taxed purchases are permitted, then the traditional check would have to be utilized for firms making such purchases and the tax-credit mechanism for others. Lastly, it is possible, as some States have done under the retail sales tax, to allow firms to make purchases tax-free and account for tax on taxable purchases themselves. Despite these qualifications, which narrow the advantage of the value-added tax over the retail sales approach, the former appears the more likely to facilitate exemption of business purchases of goods and services, while minimizing the opportunities for fraudulent diversion.

Intergovernmental Fiscal Relationships

If the Federal government were to adopt a consumption-type tax—whether value added or retail sales—two issues of paramount concern from the standpoint of intergovernmental fiscal relations would immediately arise. The first concern is the threat of Federal intrusion or preemption of this major State source of revenue. A second is the potential use of tax coordination devices for Federal and State consumption taxes.

Possible Federal Intrusion

Adoption of a Federal tax on consumption expenditures undoubtedly would be viewed as

a direct threat to the ability of State governments to make more intensive use of the retail sales taxes. Indeed, the National Governors' Conference at its 1972 meeting in Houston adopted a resolution stating that "the value-added tax would directly compete with State sales taxes in 45 States. . ."[14]

From a purely economic viewpoint, the governors' resolution is difficult to accept uncritically. The "threat" to State sales taxes exists only if there is some upper limit beyond which a tax source cannot be pushed. Such upper limits have never been established and while they may exist at some point in the rate structure, there is no evidence of their precise location or where actual rates stand in relationship to the supposed limits. Indeed, rates that were unthinkably high a few years ago have come to be legislative realities today.

It should be emphasized that the notion of an upper rate limit for an individual State is not the issue here. Clearly, substantial rate differentials between neighboring States can influence consumption habits, to the detriment of the higher-rate jurisdiction. This is not, however, a relevant consideration because it is a Federal consumption tax, over and above existing State sales taxes, that is in question. A Federal consumption tax would not do anything to increase absolute differentials in sales tax rates among States and, in fact, will tend to reduce relative rate differences in aggregate Federal-State tax rates.

Nor can it be argued that past experience substantiates the view that prior occupancy of a tax field by one governmental level precludes use of that revenue source by another. Rightly or wrongly, the Federal government moved into the death tax and income tax fields after the States. Indeed, no one level of government has exclusive rights to any particular tax. To be sure, the property tax is now almost but not totally a local revenue source, although that was not always true; both States and localities have adopted retail sales taxes; all three governmental levels tap personal income and selective sales taxes are used by each governmental level as well. Nor is there anything inherently wrong with two or more governmental levels tapping the same tax source, though issues of coordination rise to the fore.

Despite the economic case to the contrary, the very real political threat of intrustion or preemption remains. This is particularly true if the Federal tax is made explicit, rather than being buried in product price. This seems more than likely to be the case since there would be considerable pressure placed on Congress to have the tax quoted separately at retail, both to enable taxpayers to know the amount of their tax payment and to facilitate the precise shifting of the tax, thereby avoiding the necessity for retailers to readjust product prices.[15] Further, the regulated industries can be expected to throw their full support behind a separately quoted tax to avoid "absorbing" the tax until the various regulatory commissions decide to grant the necessary rate increases.

Based in part on the notion of an upper rate limit, the argument generally runs that given existing State sales taxes, a new Federal consumption levy on top of these will inhibit further retail sales rate increases by governors and mayors since consumers may or may not distinguish between the level of government imposing the tax, but surely will consider the height of the levy. Although not explicitly stated, proponents of this view further assume that, while higher Federal taxes on personal income, for example, will deter consumption expenditures, comparable political heat will not be generated on State and local officials because it clearly will be a tax imposed by a different governmental level on a different tax source.

To the extent that this argument rests on a new tax being imposed by a different governmental level, both a Federal value-added tax and a retail sales levy could allay such fears. In practice, the retail sales tax is clearly identified as a percentage of product price and there is no reason why a Federal levy on retail sales would not be. Moreover, while European value-added taxes are generally included in the product price at the retail stage, there is no reason why this need be so and a Federal value-added tax could be quoted separately.

More likely, the fear of Federal usurpation rests on the tax source side of the problem. In this regard, there is little choice between the value-added and the retail sales tax. The retail sales tax would be as direct an intrustion as possible; it is, after all, the tax instrument used by States and localities. Yet, the value-added

Table 24—Comparison of State Shares of Retail Sales and Value Added

State	Percent of Retail Sales	Percent of Value Added*	Percentage Difference
Alabama	1.33%	1.26%	— 5%
Alaska	.13	.08	—38
Arizona	.80	.54	—33
Arkansas	.82	.60	—27
California	10.80	10.47	— 3
Colorado	1.06	.79	—25
Connecticut	1.63	1.96	+20
Delaware	.30	.32	+ 7
Florida	3.31	2.36	—29
Georgia	1.99	1.90	— 5
Hawaii	.35	.26	—26
Idaho	.37	.24	—35
Illinois	6.21	7.58	+22
Indiana	2.68	1.23	—54
Iowa	1.62	1.26	—22
Kansas	1.11	.86	—23
Kentucky	1.28	1.23	— 4
Louisiana	1.53	1.22	—20
Maine	.47	.39	—17
Maryland	1.87	1.64	—12
Massachusetts	2.95	3.12	+ 6
Michigan	4.55	5.46	+20
Minnesota	1.93	1.69	—12
Mississippi	.81	.62	—23
Missouri	2.44	2.44	0
Montana	.37	.19	—49
Nebraska	.82	.58	—29
Nevada	.29	.37	+28
New Hampshire	.38	.33	—13
New Jersey	3.66	4.32	+18

Table 24—Comparison of State Shares of Retail Sales and Value Added (continued)

State	Percent of Retail Sales	Percent of Value-Added	Percentage Difference
New Mexico	.44	.26	—41
New York	9.38	12.75	+36
North Carolina	2.14	2.24	+ 5
North Dakota	.32	.14	—56
Ohio	5.25	6.53	+24
Oklahoma	1.18	.75	—36
Oregon	1.08	.91	—16
Pennsylvania	5.64	6.44	+14
Rhode Island	.45	.47	+ 4
South Carolina	1.00	1.00	0
South Dakota	.33	.15	—55
Tennessee	1.70	1.81	+ 6
Texas	5.30	4.20	—21
Utah	.45	.35	—22
Vermont	.23	.19	—17
Virginia	1.98	1.61	—19
Washington	1.76	1.50	—15
West Virginia	.68	.70	+ 3
Wisconsin	2.14	2.27	+ 6
Wyoming	.17	.09	—47
Washington, D.C.	.52	.41	—21

Value-added figures include estimated value added in the State from manufacturing, wholesale distribution, retailing, and services, excluding transportation, finance, communications, mining and construction.

Source: John F. Due, "A Federal Value Added Tax" Paper Presented at the 40th Annual Meeting of the National Association of Tax Administrators, St. Paul, Minnesota.

Notes: Based on 1967 data from *U.S. Statistical Abstract, 1971.*

tax offers nothing salutary either. The consumption variant of this levy is, in essence, equivalent to a retail sales tax confined to consumption goods with the singular differences being in method of collection and nomenclature. As such, neither tax is likely to assuage fears of potential Federal intrusion into the sales tax field. Charles E. McLure, Jr., reaches essentially similar conclusions:

> . . . from the standpoint of intergovernmental relations the Federal government should adopt a retail sales tax, rather than a credit type (consumption) VAT, if it is to adopt either. This contention rests upon the ease of piggy-backing State and local levies on a Federal retail sales tax and the difficulty of doing so under a Federal VAT. It might be objected that Federal use of a retail sales tax would be considered an intrusion into a field heretofore reserved for the exclusive use of State (and more recently local) governments. But this argument is based more on illusion than reality, even if the shaky argument that general consumption taxation should be left to the States and localities is granted. Retail sales taxes and value-added taxes of the consumption type are basically equivalent, as noted above. Thus a Federal retail sales tax would involve no more intrusion into the general consumption tax field than would a VAT.[16]

A Federal value-added tax might also make inroads on tax policy at the State-local level by thwarting efforts to enact sub-national value-added taxes. The case for sub-national value-added taxation is based on the idea that States and localities existing in an open economy have limited opportunities to apply taxes to all economic production that takes place within their boundaries. Although viewed as a sales tax when discussed as a Federal tax, the value-added levy can be defended at the sub-national level as a benefits received tax—with the cost of governmental services necessary for doing business being paid by business, as measured by value added. Although no sub-national value-added taxes presently exist, this tax has been given serious consideration in several State legislatures and by local governments in at least New York and California.

Tax Coordination

As this Commission has said in the past:

> The use of the same kind of tax by two or more levels of government is not poor public policy in and of itself. It becomes poor policy only when one level of government uses a particular tax without regard for the use made of it by another and in such a way that (a) the cumulative tax take of all governments does gross violence to an acceptable pattern of tax burden distribution, and (b) the overlapping is accompanied by inefficient use of tax enforcement resources and needless taxpayer compliance burdens.[17]

Among the prime intergovernmental questions relating to possible adoption of a Federal consumption tax is that of tax coordination. Such coordination is desirable in that it can reduce collection costs for governments and ease taxpayer compliance. Unfortunately, the prospects for integrating either a Federal retail sales or a consumption-type value-added tax with State and local sales taxes are bleak. To the extent that differences exist between the two Federal consumption taxes in this regard—and the differences are minimal—the advantage accrues to the retail sales tax.

One approach to coordination would be for the Federal government to pattern its statute after the State legislation. Here there is no potential at all for the value-added tax simply because there are no State or local value-added taxes presently in existence. Prospects are only slightly brighter for coordinating a Federal retail sales tax because of the opposite phenomenon—there are too many State and local sales taxes, virtually all of which differ from each other. Hence, there is no single existing sales tax to adopt as a standard for Federal policy.

The second approach toward achieving coordination would be to have the Federal government define its own tax base for either consumption tax and offer to collect those State and/or local levies that are in substantial conformity with the Federal base. Since there are no sub-national value-added taxes, this would require integration of a Federal value-added tax or retail sales tax with State-local retail sales levies. Assuming that States were willing to conform their base to a Federal value-added tax, the difference in method of collecting the two levies would still preclude the objectives of tax co-ordination—i.e., reduced costs of administration and facilitating taxpayer compliance. For the Federal govern-

ment to strengthen its demands and require States to eliminate their retail sales tax and switch over to equivalent yield value-added taxes to be piggy-backed on the Federal tax would compound State revenue-raising problems. This results from the fact that the distribution of value added (incompletely measured, however) varies from the distribution of retail sales among States. *(See Table 24.)* Thus, if States have tailored their retail sales taxes to internal economic conditions such divergences would result either in surpluses and deficits (if the existing retail sales tax rates were applied to the new State value-added taxes) or rather strange tax rates (if rates were adjusted to offset the relative change in base).

Whatever possibility there is to secure conformity seems, perhaps only by default, to lie with adoption of a Federal retail sales tax and the offer to collect those State retail sales tax that conform to the Federal base.[18] Here the critical question is the degree to which States would be willing to accept the Federal base voluntarily and alter their existing tax bases to conform. Because of the differences in existing State sales taxes, it is, to say the least, difficult to be optimistic about this potential.

Administrative Considerations

Since both a Federal value-added tax and a national retail sales tax would be new departures in Federal tax policy, administrative costs can be expected to be relatively high compared to making more intensive use of the income tax. Between the two forms of consumption tax, however, the differences are less clear-cut though on balance a slight advantage would seem to accrue to the retail sales tax.

Perhaps the most basic consideration is the simple fact that the retail sales tax is already familiar to the American businessman. Taxpayer compliance, while not necessarily ideal, is more than adequate in the 45 States where sales taxes presently exist. Moreover, there would be less paperwork involved with a Federal retail sales levy than with a Federal value-added tax with a similar base.

Another crucial factor determining administrative costs is the number of potential taxpayers. Since a Federal retail sales tax would apply only to the retail sector while the value-added tax is paid by all sectors in the production-distribution process, the number of taxpayers under the retail sales tax would be smaller.[19] Further, there would be a relatively large number of small retailers included in the tax base but this would also be the case under the Federal value-added tax. If it were felt desirable to exclude the small retailer for administrative reasons, the arguments would seemingly be equally persuasive regardless of the Federal tax instrument—retail sales or consumption value added. If, on the other hand, small retailers were to be included in the tax base, then the greater familiarity and availability of audit experience would seem to tip the scales in favor of the retail sales tax.

One frequently discussed issue is the self-enforcing nature of the value-added tax and hence the relative ease of enforcement. This argument, while possibly of considerable importance in countries where tax compliance is lax, is much less relevant in this country, where tax compliance problems are generally considered to be minimal.

FOOTNOTES

[1]U.S. Congress, House of Representatives, Ways and Means Committee, *Revenue Revision of 1943*, "Considerations Respecting a Federal Retail Sales Tax, History of Federal Sales Tax Proposals," pp. 1097-1114, 78th Congress, 1st Session.

[2]William H. Forst, "Limited Coverage of Services—The Iowa Experience," *Proceedings of the 62nd Annual Conference of the National Tax Association*, Boston, Massachusetts, 1969, pp. 162-63.

[3]Robert N. Schoeplein, "Some Perspectives in the Sales Taxation of Services," *Proceedings of the 62nd Annual Conference of the National Tax Association*, Boston, Massachusetts, 1969, p. 168.

[4]John F. Due, "Development of Retail Sales Taxes in the 1960s and 1970s," *Canadian Tax Jurnal*, Vol. XIX, No. 6, November-December 1971, p. 550.

[5]Fred W. Bennion, "Broad Coverage of Services—Hawaii's Experience Under the General Excise Tax Law," *Proceedings of the 62nd Annual Conference of the National Tax Association*, Boston, Massachusetts, 1969, p. 160.

[6]John F. Due, "The New State Sales Taxes 1961-68," *National Tax Jurnal*, Vol. XXI, No. 3, p. 286.

[6]*Op. cit.*, p. 175.

[8]John Due, "A Federal Value-Added Tax," Paper presented to the Fortieth Annual Meeting, National Association of Tax Administrators, St. Paul Minnesota, June 14, 1972.

[9]Douglas H. Eldridge, "Equity, Administration and Compliance, and Intergovernmental Fiscal Aspects," in *The Role of Direct and Indirect Taxes in the Federal Revenue System*, A Conference Report of the National Bureau of Economic Research and the Brookings Institution, Princeton, New Jersey, 1964, p. 172.

[10]John F. Due, "Development of Retail Sales Taxes in the 1960s and 1970s," *Canadian Tax Journal*, Vol. XIX, No. 6, November-December, 1971, p. 550.

[11]John F. Due, *State Sales Tax Administration*, Public Ad-

ministration Service, Chicago, Illinois, 1963, pp. 14-15.

[12]William H. Hickman, *Distribution of the Burden of California Sales and Other Excise Taxes*, Sacramento, California, 1958, p. 42.

[13]Daniel C. Morgan, Jr., *Retail Sales Tax: An Appraisal of New Issues*, The University of Wisconsin Press, Madison and Milwaukee, Wisconsin, 1964, pp. 26-27.

[14]*New York Times*, June 8, 1972, p. 25.

[15]John F. Due, "Integrating a Federal Value-Added Tax with State and Local Sales Levies: Discussion," *National Tax Journal*, 24, September, 1971, p. 419.

[16]Charles E. McLure, Jr., *op. cit.*, p. 26.

[17]Advisory Commission on Intergovernmental Relations, *Tax Overlapping in the United States*, M-23, July, 1964, Washington, D.C., p. 3.

[18]Professor Lindholm has suggested a Federal value-added tax to replace State sales taxes and distributed among States on the basis of retail sales in his paper "Integrating a Federal Value-Added Tax with State and Local Sales Levies", *National Tax Journal*, Vol. XXIV, No. 3, September, 1971, pp. 403-411. For a critical analysis, see the discussion by James A. Papke ((pp. 413-415) and John F. Due (pp. 417-419).

[19]It must be noted, however, that States require any manufacturer or wholesaler making retail sales to be registered and that a number of States require registration of wholesalers and manufacturers for purposes of purchasing tax free for resale.

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402 - Price $1.15
Stock Number 5204-0047

U. S. GOVERNMENT PRINTING OFFICE : 1973 O - 522-874

COMMISSION MEMBERS

(MAY 1973)

PRIVATE CITIZENS

Robert E. Merriam, Chairman, Chicago, Illinois
Robert H. Finch, Los Angeles, California
Vacancy

MEMBERS OF THE UNITED STATES SENATE

Ernest F. Hollings, South Carolina
Edmund S. Muskie, Maine
Charles H. Percy, Illinois

MEMBERS OF THE U.S. HOUSE OF REPRESENTATIVES

L. H. Fountain, North Carolina
Al Ullman, Oregon
Clarence J. Brown, Jr., Ohio

OFFICERS OF THE EXECUTIVE BRANCH, FEDERAL GOVERNMENT

Kenneth R. Cole, Jr., Executive Director, The Domestic Council
George P. Shultz, Secretary of the Treasury
Caspar W. Weinberger, Secretary of Health, Education and Welfare

GOVERNORS

Dale Bumpers, Arkansas
Richard F. Kneip, South Dakota
Daniel J. Evans, Washington
Robert D. Ray, Iowa

MAYORS

C. Beverly Briley, Nashville, Tennessee
Richard G. Lugar, Vice Chairman, Indianapolis, Indiana
Jack D. Maltester, San Leandro, California
John D. Driggs, Phoenix, Arizona

STATE LEGISLATIVE LEADERS

B. Mahlon Brown, Senator, Nevada
Robert P. Knowles, Senator, Wisconsin
Charles F. Kurfess, Minority Leader, Ohio House of Representatives

ELECTED COUNTY OFFICIALS

Conrad M. Fowler, Shelby County, Alabama
Edwin G. Michaelian, Westchester County, New York
Lawrence K. Roos, St. Louis County, Missouri

what is acir?

The Advisory Commission on Intergovernmental Relations (ACIR) was created by Congress in 1959 to monitor the operation of the American federal system and to recommend improvements. ACIR is a permanent national bipartisan body representing the executive and legislative branches of Federal, State and local government and the public.

Of the 26 Commission members, nine represent the Federal government, 14 represent State and local governments and three represent the general public. Twenty members are appointed by the President. He names three private citizens and three Federal executive officials directly and selects four governors, three State legislators, four mayors and three elected county officials from slates nominated, respectively, by the National Governors' Conference, the Council of State Governments, the National League of Cities/U.S. Conference of Mayors, and the National Association of Counties. The other six are Members of Congress – three Senators appointed by the President of the Senate and three Representatives appointed by the Speaker of the House. Commission members serve two-year terms and may be reappointed. The Commission names an Executive Director who heads the small professional staff.

After selecting specific intergovernmental issues for investigation, ACIR follows a multi-step procedure that assures review and comment by representatives of all points of view, all affected levels of government, technical experts and interested groups. The Commission then debates each issue and formulates its policy positions. Commission findings and recommendations are published and draft bills and executive orders are developed to assist in implementing ACIR policies.