Table 17

RATES OF FEDERAL EXCISE TAXES ON CERTAIN MISCELLANEOUS GOODS AND SERVICES

January 1956

Item	Rate	Tax as Approximate Percent of Retail Price Including Tax
Jewelry, Furs, Toilet Preparations, Luggage	10% of retail price	9%
Admissions, General (over 50 cents)	10% of amount charged	9
Cabarets		
Club Dues and Initiation Fees	20% of amount charged	16 2/3
Horse and Dog Races		
Radio and Television Sets		
Phonographs and Phonograph Records		
Cameras, Lenses and Film		
Musical Instruments		
Sporting Goods, Pistols and Revolvers	10% of manufacturer's price	5-7
Electric Light Bulbs		
Fountain Pens, Ball-Point Pens, Mechanical Pencils		
Business and Store Machines		
Electric, Gas, and Oil Appliances		
Refrigerators, Refrigeration Apparatus and Quick-Freeze Units	5% of manufacturer's price	3

Source: Treasury Department.

other forms of purchased entertainment. Refrigerators, electric, gas and oil appliances are possibly "necessities" for more people than are radios, television sets, cameras, etc.

The taxes on issues and transfers of stocks and bonds and deeds of conveyance are traditional Federal taxes. Most of the present taxes date from World War I, although bond transfers were made taxable in 1932 and deeds of conveyance were not taxable 1926-1932. Similar documentary taxes were levied during 1797 and 1813, and again during the Civil War and the Spanish American War. Present rates have been unchanged since 1940.

A subcommittee of the House Committee on Ways and Means has recently recommended that the tax on sales or exchanges of stock be made 5¢ per $100 of actual value (rather than the present assorted rates on par or face value). A similar change would be made in the tax on stock issues.[2]

D. Weaknesses of the Present Excise Tax System

The major weaknesses of the present excise tax system are discriminatory rates, rather haphazard selection of taxable items, and concentration of the major part of the excise tax burden on a relatively few types of goods and services.

1. Discriminatory Rates

The variations in the rates of existing excises are evident in Tables 15-17. The tax on distilled spirits is about 43 percent of the retail price including tax, while the tax on wines, liqueurs, etc. (not over 24 percent alcohol content), varies from 4 to 26 percent of the retail price. The tax on cigarettes is about 37 percent of the retail price, while that on cigars is about 9 percent of the retail price.

The tax rates on transportation and communication are quite uniform as a result of the Excise Tax Reduction Act of 1954. However, uniformity of rates by no means eliminates discrimination. Since the tax on transportation of property applies to shipments of raw materials as well as finished goods, there is some pyramiding of the tax as goods go through the various stages of production. This also applies in some degree to the taxes on gasoline and diesel fuel. Moreover, the importance of transportation and communications costs differs for different kinds of business. In addition, there is discrimination between purchased transportation services and privately operated transportation. The tax on purchased transportation services is said to be stimulating business firms to provide their own transportation services. The tax on transportation of persons may similarly tend to increase private use of automobiles at the expense of purchased transportation.

In the Revenue Act of 1951, Congress specifically exempted from most of the manufacturer's excises goods used for business purposes. At that time revenue considerations would scarcely permit a similar exemption from the taxes on transportation and communication. More than half of the revenue from these taxes comes from the taxes falling initially on business.

2. Report to the House Committee on Ways and Means from the Subcommittee on Excise Tax Technical and Administrative Problems, April 20, 1956, p.6.

The rates of the taxes on miscellaneous goods and services were also made substantially more uniform by the Excise Tax Reduction Act of 1954. But that Act left the tax on cabarets, club dues, and horse and dog races at 20 percent while the tax on other admissions was reduced to 10 percent. In a recent report a subcommittee on excise tax technical and administrative problems of the House Committee on Ways and Means remarked that "Although limited by the rules under which it was established to technical and administrative excise tax problems, the subcommittee has become aware of the substantial inequality, relative to most excises, in the present 20-percent tax rates on cabarets and club dues." The 1954 Act also made a substantial exception to the 10 percent rate of manufacturers' excises by making the rate on electric, gas and oil appliances, and refrigerators and refrigeration equipment 5 percent.

2. Selection of Taxable Items

While discrimination as a result of differential rates was substantially reduced by the Excise Tax Reduction Act of 1954, discrimination also results from the rather haphazard selection of items to be taxed and the omission of items very similar in nature to taxable commodities and services.

Table 18 shows a selected list of taxable and non-taxable commodities under present law. It is evident that the basis for selection of taxable goods leaves much to be desired. The resulting discrimination among consumers and producers was recognized in the report of the subcommittee on technical and administrative problems of the House Committee on Ways and Means. The recommendations of that subcommittee would remove many inequities under present law. However, these inequities are chiefly those arising out of ambiguities or outmoded technical details in present law; the subcommittee's frame of reference did not include the policy problem of choosing appropriate bases for selective excise taxes. Thus even if all of the subcommittee's recommendations are accepted, only three items in Table 18 would need revision. It is doubtful that discrimination of this kind can be removed from a selective excise tax system; by definition a selective excise tax system hits a minority of goods and services, and there are no generally acceptable, unambiguous principles for selection of taxable items (see below pp. 45, 46).

3. The Concentration of Present Excises

It has been noted above that liquor and tobacco taxes account for 47 percent of total Federal excise tax receipts. The taxes on transportation and communication account for 65 percent of the revenue from the remaining excises. Together the taxes on liquor and tobacco and transportation account for 81 percent of total excise tax receipts. Liquor, tobacco and taxable transportation account for only about 20 percent of total personal consumption expenditures excluding food.

The fact that the relatively narrow range of goods and services subject to Federal excises yields about $9 billion, or about half of corporation income tax receipts, is indicative of the relatively high rates to which they are subject. A wider excise tax base would make possible a lower level of rates and also, if necessary, a higher revenue yield.

Table 18

SELECTED TAXABLE AND NON-TAXABLE COMMODITIES

UNDER FEDERAL EXCISE TAXES

January 1956

Taxable	Non-Taxable
Mechanical pencils	Lead pencils
Fountain pens	Pen holders & pen points
Badminton equipment	Baseballs and baseball equipment
Polo equipment	Water polo equipment
Cold cream	Shaving cream
Electric blankets	Electric heating-pads
Electric dishwashers	Electric washing machines
Electric & gas clothes driers	Vacuum cleaners
Fur coats	Woolen coats
Automobile tires	Tires on children's toys, lawnmowers, etc.
Electric irons	Electric shavers
Air conditioners	Industrial fans
Automobiles	House trailers, motor boats, yachts
Lipstick	Nylon stockings
Soapless shampoo	Toilet soap
Rouge	Toothpaste
Beer	Soft drinks
Brooches	Buttons
Muskrat scarf	Squirrel trimmed cloth coats
Cigarettes, tobacco	Smokers' pipes
Lorgnettes	Eyeglass frames
Hair lotion	Hairbrushes
Suntan oil	Vinegar
Permanent waving solution	Bobby pins
Electric light bulbs	Candles
Phonographs	Tape recorders
Electric garbage disposal units	Gas incinerator garbage disposal units
Electric floor polishers	Attachments for waxing & polishing floors

CHAPTER V

ALTERNATIVES FOR REVISION OF EXCISE TAXES

A. A Permanent Selective Excise System

The characteristics of commodities suitable for excise taxation have been set out as follows:[1]

(1) A large sales volume-- "...without this the revenue might not be deemed to justify the cost of administration."

(2) An inelastic demand-- "Otherwise, the tax may greatly harm the industry, produce little revenue, and deprive consumers of the benefit of the product."

(3) The commodity should not be a necessary item of consumption.

(4) The commodity should be readily definable.

(5) The commodity should not be in direct competition with untaxed items.

Unfortunately, these criteria are difficult to apply to specific cases. How large is "a large sales volume"? What degree of elasticity of demand is acceptable? What is a necessity? What is "direct competition" between commodities? The criteria also are not entirely consistent. If a commodity has a large sales volume and an inelastic demand, it must be considered a necessity in some degree by consumers.

Application of these criteria, then, is an uncertain procedure. And the uncertainty is bound to be greater the more a selective tax system is extended. The greater the uncertainty of the criteria, the more room there is for pressures by special interests, and the more difficult Congress finds it to resist reductions in taxes falling on industries which are in unfavorable circumstances for other reasons.

Except for emergencies, the tendency is for a selective excise tax system to be successively narrowed. In Chapter II the rapid retrenchment of excise taxes after the Civil War, the Spanish American War and World War II has been noted. Of the extensive excise system adopted in 1932, the Revenue Acts of 1934, 1936 and 1938 removed the taxes on the following: ordinary wood and paper matches, jewelry, furs, phonographs records, sporting goods, cameras, chewing gum, candy, certain toilet preparations, soft drinks, use of boats, sales of produce for future delivery. While the World War II excise tax system has remained largely unchanged, a few excises have been eliminated (the taxes on passage tickets by vessel to foreign ports, electrical energy, use of automobiles, use of boats). The Revenue Act of 1950 as passed by the House, just before the outbreak of the Korean War, provided

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1. Roy Blough, The Federal Taxing Process (New York 1952), pp. 341,342.

for substantial reductions in excise tax rates and eliminations from the tax base; the proposed reductions ranged from 20 to 56 percent (in terms of expected revenue loss) for the major excises except those on liquor and cigarettes.

It may be concluded that a selective excise tax system is hardly consistent with maintaining or increasing the role of excises in the Federal tax system. A permanent selective excise tax system would only be consistent with a reduced role for excise taxes.

B. A General Sales Tax

The difficulties inherent in a selective excise tax system point to the substitution of a general sales tax. The uniform rate and broad base of a general sales tax would largely eliminate the present problem of discrimination. The broader base would also make possible a lower rate than the rates of present selective excises. The reasons given above in Chapter III for continued use of excises apply to a general sales tax as well as to selective excises.

The available evidence does not indicate that the substitution of a general sales tax would make a significant difference to the distribution by income classes of the present excise tax burden provided food is exempt. The most recent information available on the distribution of family expenditures by type and by income classes is that obtained by the Bureau of Labor Statistics in the 1950 Survey of Consumer Expenditures. The breakdown by type in this study is not detailed enough to segregate completely those expenditures now subject to Federal excises. But expenditures for tobacco, alcoholic beverages, automobile and other transportation are segregated, as well as certain other categories partially subject to Federal excises. Expenditures by type as a percent of total family income by income classes are shown in Table 19.

Table 19 indicates that in relation to income, expenditures wholly or partially subject to Federal excises and expenditures that would be subject to a general sales tax change in about the same way from low to high income classes. The two major categories of goods that are not now subject to selective excises but that would be subject to a general sales tax are clothing, and household furnishings. Expenditures on these items are a fairly constant percentage of income: 13 percent of income for families in the $2,000 to $3,000 class, 15 percent in the $5,000 to $6,000 class, 13 percent in the $7,500 to $10,000 class; and 11 percent in the $10,000 and over class. High income families can easily spend proportionately more than low income families on clothing and household furnishings. The expenditure which fall off most markedly in relation to income at higher family income levels are expenditures for food. (For a discussion of the distribution of the burden of existing excises, see above pp. 19-23.)

Table 19

FAMILY EXPENDITURE BY TYPE, AS A PERCENT OF FAMILY INCOME[a]

By Money Income Class[b]

Calendar Year 1950

	Under $1,000	$1,000 to $2,000	$2,000 to $3,000	$3,000 to $4,000	$4,000 to $5,000	$5,000 to $6,000	$6,000 to $7,500	$7,500 to $10,000	$10,000 and over
Total Current Consumption Expenditures	179%	109%	101%	95%	89%	88%	84%	77%	60%
Expenditures Wholly or Partially Subject to Federal Excises	33	25	28	29	29	30	27	25	22
Automobile and Other Transportation	10	8	11	12	12	13	12	10	7
Household Operation and Equipment[c]	14	8	8	7	7	7	7	7	8
Personal Care and Recreation	6	6	6	7	6	6	6	5	4
Tobacco	2	2	2	2	2	1	1	1	1
Alcoholic Beverage	1	1	1	1	2	2	1	2	2
Expenditures Wholly or Partially Subject to a General Sales or Excise Tax	49	38	42	42	43	44	42	38	32
Expenditures Wholly or Partially Subject to Federal Excises	33	25	28	29	29	30	27	25	22
Clothing	11	10	10	11	11	11	11	11	9
Household Textiles, Furniture and Floor Coverings	4	2	3	3	3	4	4	2	2
Expenditures Not Subject to a General Sales or Excise Tax	131	72	59	53	47	44	42	39	28
Food	60	38	34	30	27	25	24	21	13
Housing, Fuel, Light, Refrigeration and Water	47	24	17	15	13	12	11	11	9
Medical Care	14	6	5	5	4	4	4	4	2
Education	1	(d)	(d)	1	1	1	1	1	1
Miscellaneous[e]	8	3	2	2	2	2	2	2	2

a. Data based on a 17 city subsample of the 47 city national urban sample selected for the 1950 consumer expenditure survey. Expenditures are shown as a percentage of money income before taxes plus other money receipts (inheritances, large gifts, lump sum settlements from accident or health policies). Detail will not necessarily add to totals because of rounding.
b. Money income after personal taxes (Federal and state income, poll, and personal property).
c. Excluding household textiles, furniture and floor coverings.
d. Less than .5 percent.
e. Interest on personal loans, funeral expenses, money lost or stolen, allowances to children at home or school, reading.

Source: Bureau of Labor Statistics.

C. Relative Merits of a Retail Sales Tax, A General Manufacturers' Excise Tax, and a Value Added Tax

There have been many discussions in recent years of the merits of these forms of a broad based sales or excise tax.[2] The following is a summary of major points. The discussion is outlined in Table 20 in which these three types of tax are rated according to the various criteria usually used in comparing them. The nature and size of the base of these taxes are discussed in the Appendix.

1. Avoidance of Discrimination

One of the important advantages of a general sales tax is the reduction of the discrimination connected with selective excises. But since general sales taxes are not completely general and involve to some degree taxation of business costs as well as of final product, discrimination is not entirely removed.

A tax on value added would be the most inclusive of these three types of sales tax, and such a tax is designed so that the tax at one stage of production cannot become part of the tax base at a later stage of production. The base of a tax on value added has been described as "the gross sales of a concern less the costs of materials and services procured from other enterprises for use in production."[3] The base is intended to measure the net addition made by every business to the value of the goods and services it sells. Such a tax is the "business receipts tax" levied in Michigan.

A retail sales tax which includes a wide range of services is uniform in its immediate impact on various kinds of consumption goods. But it has not been found possible in the state retail sales taxes to eliminate numerous kinds of goods and services used for business purposes. As explained in the Appendix, the base of retail sales taxes is broader than the usual concept of retail sales. The tax applies to sales of tangible personal property not for resale. "Not for resale" is defined by the "physical ingredient rule": goods which become a physical ingredient of the final product are not taxable. Unless specifically exempted, sales of

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2. For example:
   "Factors Affecting the Choice of a Retail Sales Tax in Preference to the Other Types of Sales Taxes," Division of Tax Research, Treasury Department, Hearings before the Committee on Ways and Means, 78th Congress, 1st Session, Revenue Revision of 1943, Revised.
   John F. Due, The General Manufacturers Sales Tax in Canada, Canadian Tax Papers No. 3, Canadian Tax Foundation, Toronto 1951.
   Committee on Federal Tax Policy, Federal Finances: #3 The Tax Program, New York 1954.
   Federal Tax Policy for Economic Growth and Stability, papers submitted by panelists appearing before the subcommittee on tax policy, Joint Committee on the Economic Report, November 1955, Topics V & XI.
   Peter A. Firmin, The Michigan Business Receipts Tax, Michigan Business Reports No. 24, Bureau of Business Research, University of Michigan, 1953.

3. Paul Studenski, "Toward a Theory of Business Taxation," Journal of Political Economy, October 1940, quoted in Viewpoints on Public Finance, Ed. by H. M. Groves (New York 1947), p.267.

machinery, equipment and materials which are used in production but which do not become a physical part of the final product are taxable. Consequently, the retail sales tax is in part a multiple stage tax--the tax is applied both to certain elements of business cost and again to the final product. There will be some discrimination against firms and products a relatively large part of whose costs are for taxable things which do not become a physical part of the final product.

The same problem arises under the manufacturers excise tax. By means of a licensing system sales by one manufacturer to another can be exempted. But there would remain a substantial range of taxable commodities used for business purposes. According to a study by the Canadian Tax Foundation, about 24 percent of revenue from the Canadian manufacturers' sales tax in 1954 was accounted for by goods purchased by industry.[4]

On this score then there is little to choose between a retail sales tax and a manufacturers' excise tax. However, a retail sales tax would lend itself to taxation of a wide range of services as well as commodities. For this reason there would be less discrimination under a retail sales tax among consumers who distribute their expenditures differently between commodities and services.

2. Distribution of the Burden by Income Classes

The uncertainties in the theory of tax incidence make it difficult to compare the distribution of the burden of the three kinds of tax. But it has been indicated above (p. 46) that the exemption of food makes a substantial difference to the distribution of the burden of a general sales tax.

It is doubtful whether it would be feasible, under a value added tax, to exempt food or to use any exemption based on kind of product. For to segregate for tax purposes the value added at the earlier stages in production of particular kinds of final products is almost impossible. To exempt the value added to food on the farm, by transportation, manufacturing, wholesaling and retailing would mean extremely complicated and expensive administration procedures. To the extent that the burden of a value added tax would be passed on to the final consumer, the distribution of the burden would tend to be regressive, for total consumer expenditures fall off rapidly as a percentage of income at higher levels of family income. (See Table 19 above.) On the other hand, the exemption of food under a retail sales tax or a general manufacturers' excise tax would make the burden of these taxes approximately proportional to income except at very high income levels.

A tax on value added has often been justified on the benefit principle of taxation. Some experts consider it a tax on business as such, justified by the services business received from government; and the net contribution to production by a business firm is regarded as the fairest measure of the amount of government services absorbed by the business firm.[5] Similar arguments have been made for the corporate income tax. Professor H. M. Groves sweeps away these arguments as follows:

4. Tax Memo, No. 8, September 1955.

5. Studenski, loc. cit., pp.275-276.

"...all these theoretical props for business taxation are more or less rationalizations to support a tax program chosen mainly with opportunistic motives. The business tax is acceptable at all only on the score that there are worse ways of raising revenue. In choosing among forms and bases of business taxes, principal attention should be given to their incidence and effects."[6]

We have argued above that the distribution of the tax burden may not be of prime importance in tax policy. It is nevertheless an important consideration, and in the choice among types of general sales tax, this criterion favors the retail sales tax and the manufacturers excise tax.

There is insufficient data to determine the difference between the distribution of the burden of a retail sales tax and a general manufacturers' excise tax. But a retail sales tax would be more conducive to the inclusion of a wide range of services. Since services tend to be relatively more important in the family budgets of higher income groups, there is some presumption in favor of a retail sales tax over a manufacturers' excise tax.

3. Consumer Awareness of the Tax and Its Amount

Hidden taxes are conducive to apathy on the part of the taxpayer. In this respect a retail sales tax has an advantage in that the tax can be billed separately to the consumer. To state a manufacturers' excise tax separately would in effect reveal wholesalers' and retailers' margins. But while consumers could not know the exact amount of the tax, there seems to be no reason why the consumer would be unaware of the existence of a uniform manufacturers' excise tax, or of a value added tax.

Since the value added tax is often regarded as a tax on business, there might be a tendency for the consumer to assume that no part of the burden would fall on him. For this reason the value added tax is rated below a manufacturers' excise tax in Table 20 under the criterion of consumer awareness.

4. Pyramiding

There are two meanings of the term "pyramiding." One meaning is that a tax will be levied on a tax. For example, if a manufacturer pays a tax on goods that he buys from another manufacturer and then pays a tax on his own sales, we have a turnover tax with the tax at one stage of production forming part of the base of the tax at a later stage of production. This kind of pyramiding applies to the gross receipts taxes and to a less extent to the retail sales taxes now levied by most of the states. As has been indicated above, it is avoided to some extent by the use of the physical ingredient rule; in addition, a license system can be used under which a sale by one licensed taxpayer to another for resale for use as part of a taxable product would be exempt. But to the extent that other sales for business purposes are included in the tax base, there would be some pyramiding of this sort.

The other meaning of "pyramiding," the one commonly referred to in discussions of a general sales tax, is that a tax imposed at the manufacturer's level

6. Postwar Taxation and Economic Progress, New York 1946, p.108.

would result in a retail price increase greater than the amount of the tax. The argument here is based on the widespread practice in distribution of fixed percentage markups. For example, if the retailers' and wholesalers' markups together are say 60 percent of the manufacturers' price, and a 5 percent tax is levied on the manufacturer, then the retail price could increase by 160 percent of the amount of the tax. That is, assuming a constant percentage markup, the wholesaler and retailer take their markups on the tax as well as the price of the commodity.

It is argued that the imposition of the tax at the manufacturing level imposes extra costs on retailers. More working capital must be tied up in carrying higher valued inventories. Where salesmen's commissions, insurance, and rents are related to the value of sales, such costs will go up with the additional tax burden. To the extent that costs do go up in proportion to the value of sales, there will be some justification for a price increase greater than the amount of the tax.

But it is clear that goods are not sold at an absolutely constant percentage markup. If retailers find difficulty in moving goods, they run sales which make a considerable difference to their actual average markup. Moreover, if they are able to raise prices by more than the amount of a new tax, it may be asked why they do not raise prices in the absence of the tax. If the competitive pressure is such as to keep retail profits at a relatively low level, it is not clear how the imposition of a tax will reduce the competitive pressure.

A study of changes in list prices of electrical appliances following the 1954 excise tax reductions gives some support to the pyramiding argument with respect to large appliances (those selling typically for over $100) but not for small appliances. According to information in that study there was no upward pyramiding on small appliances when the tax was originally imposed.[7]

The fact that retail margins are not constant is evident from the changes in retail and wholesale prices. If markups were constant, retail prices would fluctuate as much as wholesale prices. But general indexes of prices, as well as components of these indexes, have shown greater fluctuations at the wholesale than at the retail level.

Constant percentage markups are found chiefly in retail pricing but are of little significance in price determination at earlier stages of production and distribution. Consequently, pyramiding would be of little significance with a value added tax which is spread over all the stages of production.

5. <u>Overlapping with State and Local Taxes</u>

A retail sales tax would be levied on the same firms which are now subject to sales taxes in 33 states. Problems of compliance and administration with very similar but uncoordinated taxes could be difficult.

A manufacturers' excise tax would be levied on a different group of firms than retail sales taxes. Duplication of returns and collection machinery would be

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7. John F. Due, "The Effect of the 1954 Reduction in Federal Excise Taxes Upon the List Prices of Electrical Appliances--A Case Study," <u>National Tax Journal</u>, September 1954, pp.222-226.

avoided. However, it is generally not feasible to exclude a manufacturers' excise tax from the base of retail sales tax.[8] There would as a result be some pyramiding (in the first sense mentioned above) of state retail sales taxes on a Federal manufacturers' excise tax.

A value added tax would substantially increase the burdens of compliance by requiring returns from all business firms. It would overlap not only with state sales taxes but also with income taxes. A value added tax is, in effect, a tax on all incomes from production, since in the aggregate, value added is simply another way of viewing total national income.[9] (It is beyond the scope of this study to discuss the question of a value added tax as a substitute for income taxes.)

Sales taxes are now the largest single source of state tax revenue, accounting for about one quarter of the total. With prospective demands on state governments, particularly for highways and schools, substantial increases in state revenues will be required over the next decade.[10] Federal adoption of a retail sales tax would probably force the states into greater reliance on income taxes, which are already excessively exploited by the Federal government; such a shift would compound the problems of overlapping taxes.

6. Ease of Administration

According to a Treasury Department study, "The costs of administration and compliance are to a considerable extent determined by the number of taxpayers.[11] There are about 300,000 manufacturing firms and nearly 2 million retail firms in the United States. The number of taxpayers under a value added tax would be larger than under a retail sales tax because it would apply to business firms, both incorporated and unincorporated, at all stages of production.

Under all three forms of sales tax there would be many problems in defining the tax base and in collection and return procedures. At the Federal level these problems would be minimized under a manufacturers' excise tax because the Federal government has levied various manufacturers' excise taxes for over 20 years, and the necessary administrative organization is largely available. Experience at the state level could be drawn on in setting up a retail sales tax. However, "The accounts and records of retailers are generally much less adequate for computing and checking sales tax liability than are those of manufacturers... errors in calculating tax liability would be more likely to arise and greater opportunity would exist for outright evasion. Complete checking of returns would be more difficult, more time-consuming and, in many cases, impractical if not impossible."[12]

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8. Federal-State-Local Tax Coordination, U.S. Treasury Department 1952, p.86.

9. Net national product (the sum of net value added) exceeds national income by the amount of indirect business taxes included in market prices.

10. See Government Finances in 1965, Tax Foundation Project Note, No. 39.

11. "Factors Affecting the Choice of a Retail Sales Tax in Preference to Other Types of Sales Taxes," Division of Tax Research, Treasury Department, loc. cit., p. 1119.

12. Ibid., p. 1119.

A value added tax would present much the same administrative and definitional problems as the income tax. In finding a firm's tax base, gross sales must first be determined as in the case of both a net income tax and a sales tax. Then, as in the case of a net income tax, the deductions of goods and services purchased from other firms must be determined.

7. Ease of Compliance

For similar reasons the three taxes are ranked the same way under this criterion as under ease of administration. Manufacturers are familiar with collection procedures under Federal excise taxes. A retail sales tax would plague retailers with minor differences between the Federal and state taxes. A value added tax would require a new kind of tax return, and also considerable experience on the part of both business firms and the Internal Revenue Service to minimize its difficulties.

8. Size of Tax Rate and Base

The value added tax would have a base more than twice the size of the base of a retail sales tax or a manufacturers' excise tax. To yield a given amount of revenue, then, a value added tax would require a rate less than half as high as the rate of a retail sales tax or a manufacturers' excise tax.

The base of a retail sales tax would be somewhat larger than that of a manufacturers' excise tax. The latter would thus require a higher rate to yield a given amount of revenue.

It is estimated in the Appendix that the bases of these taxes would be of approximately the following size at 1955 levels of business activity:

Value Added Tax	$280 billion
Retail Sales Tax	151 "
Manufacturers' Excise Tax	122 "

D. Conclusion

A general sales tax has obvious advantages over a selective excise tax system if excises are to play an important role in the Federal tax system. Of the three forms of a general sales or excise tax considered in this study, the value added tax seems to be the least attractive. As between the retail sales tax and the manufacturers' excise tax, the former would probably be preferable from the immediate point of view of the consumer - its existence and amount would be clear, it would mean greater uniformity in the effective tax rate on different commodities, and it could be levied on a broader base of services as well as commodities thus making possible a lower rate for a given amount of revenue; on the other hand, in most states it would mean two sets of rates levied on the same base and duplicate returns for the same kind of tax. The manufacturers' excise tax would be preferable from the point of view of the Treasury and of state and local governments-- it would be easier and cheaper to administer, and it would interfere less with state and local sources of revenue. The taxpayer, also, of course, has an interest in keeping down administrative costs, and in the adequacy of state and local tax sources, particularly in view of the increasing demands for state and local government services.

Table 20

RANKING OF THREE FORMS OF GENERAL SALES OR EXCISE TAXES FOR FEDERAL PURPOSES UNDER SELECTED CRITERIA

Criteria for Selecting a Sales Tax	Ranking	Reasons for Ranking
1. Non-Discrimination Among Producers and Consumers of Different Goods and Services Depends on nature of tax base, particularly on the extent to which multiple taxation of same products can be avoided.	Value Added Tax	Tax applies to "value added" at each stage of production, so that tax at one stage does not become part of tax base at a later stage.
	Retail Sales Tax Manufacturers' Excise Tax	It would be impractical to exempt all sales for business purposes under either retail sales or manufacturers' excise tax. Since the retail sales tax would have a broader base of consumers goods and services, this tax would probably give rise to less discrimination than a manufacturers' excise tax.
2. Distribution of Burden by Income Classes Depends in large degree on whether food is exempt. Other expenditures are roughly proportional to income except at the very lowest and very highest income levels.	Retail Sales Tax	This tax can cover a wide range of services which are more important in family budgets at higher income levels.
	Manufacturers' Excise Tax	Not adoptable to the taxation of services.
	Value Added Tax	It would not be administratively feasible to exempt food. Thus to the extent the burden is passed on to the consumer, the burden would be more regressive than under the other taxes with food exempt.
3. Consumer Awareness of Tax and Its Amount Hidden taxes promote apathy on the part of the taxpayer.	Retail Sales Tax	Tax can be billed separately to the consumer.
	Manufacturers' Excise Tax	Consumer cannot know or estimate the amount of tax without knowing wholesalers' and retailers' mark-ups.
	Value Added Tax	Most likely to be unknown to the consumer.
4. Pyramiding It is said that where business costs are included in the tax base, consumers will pay more than the amount of the tax. That is, distributors will calculate their margins on prices that include taxes at earlier stages of production.	Retail Sales Tax	Little possibility of pyramiding.
	Value Added Tax	"Pyramiding" assumes constant percentage mark-ups which are not significant in price determination at the earlier stages of production. Since the value added tax is levied at all stages of production, the consumer is subject to no special burden different from that arising from any universal element of cost.
	Manufacturers' Excise Tax	There are differences of opinion on the extent of pyramiding, but this tax would be most conducive to it.
5. Overlapping with State and Local Taxes	Manufacturers' Excise Tax	Least duplication of compliance and administrative costs.
	Value Added Tax	Similar to income and gross receipts taxes and therefore some overlapping.
	Retail Sales Tax	33 states and over 100 cities now levy some form of this tax.
6. Ease of Administration	Manufacturers' Excise Tax Retail Sales Tax Value Added Tax	Administrative costs depend largely on the number of returns which would be by far the least under a manufacturers' excise tax.
7. Ease of Compliance	Manufacturers' Excise Tax	The Federal government has been levying selective manufacturers' excises for over 20 years, so that compliance procedures are well worked out.
	Retail Sales Tax	There would be many problems arising out of the differences among the state retail sales taxes.
	Value Added Tax	Returns would be most complicated with value added tax.
8. Size of Base	Value Added Tax Retail Sales Tax Manufacturers' Excise Tax	

Source: Tax Foundation.

APPENDIX

A. Estimated Base of a Federal Retail Sales Tax

A Federal retail sales tax presumably would be patterned to a large degree after the retail sales taxes now levied by the majority of the states. The state retail sales taxes have a base that is broader than the usual concept of retail sales. Taxable sales are not limited to sales by retail establishments. They include sales by wholesalers, manufacturers and others, of tangible personal property not for resale, i.e. for use or consumption.

The dividing line between goods sold for resale and those sold for use or consumption depends generally upon the "physical-ingredient rule."

> "...an article is considered to be resold only if it is sold again in unchanged physical form or becomes a physical ingredient or component part of another good which is resold. Thus if goods are purchased by a business firm for use in production but do not become physical ingredients of the products of the firm, their sales are retail sales and thus taxable. As a consequence, except in the few cases where specific exemptions are provided, sales of capital equipment, supplies of all types used by business firms, tools, farm equipment, fuel, building materials, and the like are subject to the tax."[1]

On theoretical grounds there is little to recommend the physical ingredient rule. Capital equipment is used up in the process of production and its cost becomes a part of the price of the final product just as much as does the cost of parts and materials. The same thing applies to other elements of cost which are not traceable as physical parts of the final product.

It is difficult, however, to suggest an alternative workable rule for segregating taxable and nontaxable sales. It would be possible to exempt sales for business purposes by means of certificates of intended use. But such an exemption would be expensive and difficult to administer.

As an alternative various classes of commodities used largely for business purposes could be specifically exempted, as is done in some states. Thus exemption of machinery, plant and office equipment, building materials, fuel, livestock, feed, seed and fertilizer would take in a large part of sales for business purposes not covered by the physical ingredient rule. Definition of these commodities would still present a problem. But some kind of exemption for major commodities not covered by the physical ingredient rule would be necessary to avoid multiple application of the tax at various stages of production.

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1. John F. Due, "Retail Sales Taxation in Theory and Practice," National Tax Journal, December 1950, p.321. A more detailed discussion of the problem of sales for business purposes may be found in John F. Due, The General Manufacturers Sales Tax in Canada, Canadian Tax Papers No. 3, Canadian Tax Foundation, Toronto 1951, Chapter IV.

The possible exemption of various items of personal consumption also presents problems. It has been indicated above (pp. 46,47) that exemption of food would be necessary to avoid regressivity in the distribution of the burden of a sales tax. For similar reasons, medicines and fuel also would probably be exempt. Tobacco and liquor presumably would remain subject to special excises, but that would not be sufficient reason for exempting them from a general sales tax. There are special reasons for having taxes on liquor and tobacco over and above those for having a general sales tax. From an administrative point of view, it would be simpler to include liquor and tobacco in the tax base and make some adjustment in the rates of special excises on these commodities.

The peculiarities of the retail sales tax base, particularly the physical ingredient rule, make it difficult to estimate directly the size of the tax base.[2] For the purpose of this study, an indirect estimate is made by starting with an estimate of total base of the state taxes on retail sales (Table A 1).

The base of the existing state taxes on retail sales is estimated by dividing the rates into the collections. In states where food is exempt, retail sales of food were added to base as estimated from collections. No adjustments were made for differences in other exemptions under the state sales taxes. For states without a sales tax, the base of a retail sales tax was estimated on the assumption that the percentage distribution of the tax base between states with and without a sales tax would be the same as the percentage distribution of personal income between these states.

On the assumption that food would be exempt from a Federal retail sales tax, retail sales of food stores were subtracted from the base estimated as indicated above. It is also assumed that a wide range of services would be subject to a Federal retail sales tax, in contrast to the narrow range of services generally subject to state taxes. In Table A 1 the estimate for services possibly subject to a Federal retail sales tax represents personal consumption expenditures for services now subject to selective Federal excises plus personal consumption expenditures for rental, cleaning and repair of taxable articles, and barber and beauty shop services. It is assumed that business purchases of services now subject to selective excises would be largely exempt under a retail sales tax.

Estimated in this way, the base of a Federal retail sales tax amounted to $151 billion for the fiscal year 1955.

B. Estimated Base of a Manufacturers' Excise Tax

In estimating the base of a manufacturers' excise tax it is assumed here that, apart from specific exemptions, manufacturers' sales included in the tax base are equivalent to manufacturers' sales in the Department of Commerce series of that name. This assumption results in some overstatement of the tax base because

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2. For a direct estimate (as well as a detailed discussion of the nature of the tax base) see "Factors Affecting the Structure of a Federal Retail Sales Tax Under Wartime Conditions," Treasury Department memorandum, Hearings before the Committee on Ways and Means, House of Representatives, 78th Cong., 1st Sess., Revenue Revision of 1943, Revised p. 1,151.

Table A1

ESTIMATED BASE OF A FEDERAL RETAIL SALES TAX

Fiscal Year 1955

(Billions)

Estimated Tax Base of a Retail Sales Tax for All States	$177
States with a Sales Tax[a]	111[b]
States without a Sales Tax	66[c]
Less: Retail Sales of Food Stores	42
Plus: Selected Services	15[d]
Equals: Tax Base of a F.deral Retail Sales Tax	151

a. Excludes Indiana which has a "gross income" tax.

b. Estimated by dividing sales tax collections by the sales tax rate in each state and adding retail sales of food in those states which exempt food. No adjustment was made for differences in other exemptions among the states. The estimate includes base of tax on retail sales only in Washington and West Virginia (which have traditional taxes on gross receipts and gross income respectively); it includes full base of general sales or gross receipts taxes in Arizona, Mississippi, New Mexico, and North Carolina.

c. Estimated on the assumption that the percentage distribution of the tax base between states with and without a sales tax would be the same as the percentage distribution of personal income between these states.

d. Personal consumption expenditures for services now subject to selective Federal excises, for rental, cleaning and repair of articles subject to a retail sales tax, and for barber and beauty shop services.

Source: Department of Commerce.

the Department of Commerce series is more inclusive than manufacturers' sales for tax purposes. The Department of Commerce series is based on income tax data as published in the Statistics of Income and consequently is on a company basis rather than the establishment basis used in the Census of Manufacturers which would be more appropriate for estimating the tax base. In the Statistics of Income sales and receipts involved in any activity of a manufacturing corporation are reported, whereas in the Census of Manufacturers only establishments actually engaged in manufacturing are included. On the other hand "transfers between plants of the same company are counted as sales in the estimates based on census data, whereas they are excluded in...estimates (based on Statistics of Income), and this partly offsets the increase which results from the wider coverage on the new basis."[3]

3. Survey of Current Business, May 1948, p.8. Before 1948 the Department of Commerce published a series on manufacturers' shipments which was based on Census data. The 1948 revision to the Statistics of Income basis raised the level of sales by about 10 percent for 1947. The extent of this revision in the level of sales may indicate approximately the over-estimate of the tax base as a result of using the revised series, since the Census definition of manufacturing is nearly equivalent to manufacturing as it would be defined for tax purposes. The Census follows in the main the Standard Industrial Classification Manual which describes manufacturing establishments as those "engaged in the mechanical or chemical transformation of inorganic or organic substances into new products and usually described as plants, factories, or mills, which characteristically use power-driven machines and materials-handling equipment." (Standard Industrial Classification Manual, Volume I, Part 1 (1945) p.3).

The estimated tax base is shown in Table A2. Of the exemptions, food and beverages and tobacco are available in the breakdown of manufacturers' sales by industry (Department of Commerce). Alcoholic beverages and tobacco are shown as exemptions because, in contrast to the situation under a retail sales tax, it would probably be simpler from the point of view of administration and compliance to exempt these commodities from a general manufacturers' excise tax; for the latter would be collected from the same firms as the special excises.

The figure for government purchases of manufactured goods is a rough estimate based on two sources neither of which is satisfactory for the present purpose. The national income accounts contain a series "government purchases from business" which is broken down between construction and other purchases. "Other government purchases from business" (i.e., exclusive of construction) amounted to $32.6 billion in 1952 and $30.0 billion in 1954. These figures include purchases from all business and not merely from manufacturing.

The second source is a series formerly published by the Council of Economic Advisers, Federal cash payments to business by type of transaction. For the fiscal year 1952 (the latest available) Federal cash payments to business for major military procurement and production amounted to $11.2 billion,[4] nearly all of which would presumably be purchases from manufacturers; in addition, cash payments of $13.4 billion were shown for "operation and maintenance of equipment, research and development, reserve forces, and other," a substantial part of which would consist of purchases from manufacturers.

From these two sources it appears that in 1952 total government purchases from manufacturing industries could not have been more than about $30 billion (total government purchases from business being $32.6 billion) or less than about $15 billion (Federal major military procurement and production alone being $11 billion and state and local government purchases from business being about $4 billion). In 1955, according to preliminary estimates, total government purchases of goods and services were only about $2 billion less than in 1952. It is assumed in Table A2 that government purchases of manufactured goods in 1955 were about $20 billion.

The total of producers' durable equipment as given in the national income accounts is deducted as an exemption in Table A2. It is probable that a large part of the items in this category would be exempt from a manufacturers' excise tax. Under the Canadian manufacturers' sales tax "equipment and apparatus...to be used directly in the process of production or manufacture" is exempt.[5] However, there have been many complaints in Canada that ministerial interpretation unduly restricts this exemption.[5] No attempt is made here to segregate the items of "producers' durable equipment" that might be exempt from a manufacturers' excise tax in the United States. By deducting all of producers' durable equipment, the size of the exemption is no doubt overstated; but this serves to offset in part the overstatement of the tax base resulting from the nature of the basic series on manufacturers' sales (see footnote 3 above).

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4. The Midyear Economic Report of the President, July 1952, p.134.

5. Submission to Sales Tax Committee by the Canadian Tax Foundation, October 1955, p.14.

Table A2

ESTIMATED BASE OF A MANUFACTURERS' EXCISE TAX

Calendar Year 1955

(Billions)

Total Gross Manufa_ urers' Sales	$317
Less: Exemptions	
Food and Beverages	50
Tobacco	4
Government Purchases	20[a]
Producers Durable Equipment	24[a]
Net Exports of Manufactured Goods	9
Equals: Gross Taxable Manufacturers' Sales	210
Less: Estimated Sales to Other Manufacturers	95[a]
Plus: Selected Services	7[a]
Equals: Tax Base, Manufacturers' Excise Tax and Selected Services	122

a. See discussion in text, pp. 56-59.

Source: Department of Commerce

Net exports of manufactured goods (exports of finished manufactures and semimanufactures less imports of finished manufactures) are also deducted. Exports of manufactured goods presumably would be exempt from tax as is now the case under the selective manufacturers' excises.

Sales to other manufacturers for further processing would be exempt in order to make the tax so far as possible a single-stage tax. These sales are estimated in Table A2 by applying to gross taxable manufacturers' sales the percentage of taxable manufacturers' output going to other manufacturing industries as indicated by the Interindustry Relations Study for 1947, Bureau of Labor Statistics. Gross manufacturing output as defined in the Interindustry Relations Study for 1947 is not exactly equivalent to "manufacturers' sales" in the Department of Commerce series. Moreover, there may have been a substantial change since 1947 in the percentage of manufacturers' sales going to other manufacturers. Despite these limitations, the 1947 Interindustry Relations Study seems to provide the best available means of estimating such tax-exempt sales.

It is assumed that services now subject to selective excises would continue to be taxed with the adoption of a general manufacturers' excise tax, except that business purchases of such services would be largely exempt. The estimate in Table A2 is personal consumption expenditures, as shown in the national income accounts, for services now subject to selective excises.

The resulting estimate of the base of a manufacturers' excise tax is $122 billion at the 1955 level of business activity.

C. Estimated Base of a Value Added Tax

Estimating the base of a value added tax at the Federal level provides little difficulty because, in the aggregate, "value added" is essentially defined by national income. National income is equal to the sum of all (net) value added, that is the gross national product, less capital consumption allowances and indirect business taxes.[6]

Presumably there would be no exemptions based on kind of activity or business except for nonprofit organizations. In Michigan certain businesses are exempt because they are subject to specific state franchise or excise taxes. However, for administrative reasons, there could be an exemption, as in Michigan, of a basic amount of receipts for all business. No allowance is made for such an exemption in Table A3. In 1955 the base of a value added tax would have amounted to about $280 billion.

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6. Three other items involved in the relation between gross national product and national income, business transfer payments, subsidies less current surplus of government enterprises, and "statistical discrepancy," are of negligible importance. For a discussion of deductions under the Michigan value added tax, see Clarence W. Lock, Donovan J. Rau, and Howard D. Mailton, "The Michigan Value Added Tax," National Tax Journal December 1955, pp.357-371.

Table A3

ESTIMATED BASE OF A VALUE ADDED TAX[a]

Calendar Years 1954 and 1955

(Billions)

Scope of Tax	1954	1955 (Estimated)
(1) Manufacturing, Wholesale and Retail Trade	$141.9	
(2) Mining and Contract Construction Plus (1)	162.9	
(3) Transportation and Communications Plus (2)	182.4	
(4) Services Plus (3)	212.3	
(5) Finance, Insurance and Real Estate Plus (4)	240.1	
(6) Public Utilities Plus (5)	246.0	
(7) Agriculture, Forestry and Fisheries Plus (6)	262.6	
Less: Nonprofit Membership Organizations and Educational Services	3.5	
Equals: Tax Base	259.1	$280[b]

a. Value added is net of capital consumption allowances and indirect business taxes.

b. Estimated on basis of change in national income in domestic private industry 1954 to 1955.

Source: Department of Commerce.