1997

Consumption Taxes: An Examination

Joshua E. Richardson '97
Illinois Wesleyan University

Consumption Taxes:

An Examination

by

Joshua E. Richardson

Professor Ruth Ann Friedberg

Professor David Willis

Professor Robert Leekley

Professor Robert Schultz

Over the history of the United States, the system of taxing the citizens to pay for government expenditures has undergone a series of changes ranging from major overhauls to minor tweaks. The federal government under the Articles of Confederation had no power to impose taxes on its citizens. Funding for government came from voluntary contributions from the states.

When the Constitution was passed in 1789, this ineffective system was replaced by allowing the federal government to impose taxes. These taxes initially came in the form of excise taxes. For over seventy-five years the excise taxes were repealed, reinstated, and changed with every new political administration or military conflict.

The Civil War Revenue Act of August 5, 1861 was the first major change to the governments approach to taxes since the signing of the Constitution. This act created the national income tax. One year later the Bureau of Internal Revenue was established. The income tax was repealed in 1872 and reinstated in 1894. In 1895 the Supreme Court declared the income tax illegal, and the tax was once again removed. Finally, in 1913 the income tax debate was put to rest with the passage of the Thirteenth Amendment, which allowed the government to "tax all incomes, from whatever source derived." Since the passage of the War Revenue Act of 1917, which imposed the income tax on approximately five

percent of the population, the income tax system has undergone numerous modification which have left the United States with the system it has today (Taylor 39).

Since that time the Bureau of Internal Revenue has been renamed the Internal Revenue Service (IRS), a tax withholding system has been added, and the portion of the population subject to the tax has risen dramatically. Along with these changes came increased bureaucracy, greater distribution of the tax burden to families with lower incomes, and more complicated filing requirements. These changes through time have evolved into the current income tax system with complicated regulations and countless loopholes. For the less knowledgeable filer or individual with significant or diverse investments, complying with the income tax regulations may be a time-consuming and costly endeavor.

The time and money spent complying has reached staggeringly high levels in recent years. In 1990, Americans spent more time preparing their taxes than were required to build every automobile made in the United States, 5.4 billion hours (Armey 2). An average household spends seventeen hours a year complying with tax regulations. Nearly one-half of all Americans filing individual returns, including eleven of twelve senior members of the Congressional tax-writing committees, rely

upon the help of paid preparers to complete their taxes (Goodgame 49). This reliance upon professionals is indicative of a tax system that has become too complex for the average filer to understand. History has shown that revisions of the income tax codes do not serve to simplify it but rather to make it more complex. The entire United States system of taxation must, therefore, be recreated with simplicity in mind. In addition to being simple a tax plan should ideally also be efficient to administer, fair to all portions of society, and create little or no effect on economic decisions including work, spending, and investment decisions.

The current income tax system fails to achieve several of these goals. This paper will examine three alternatives to the income tax: a national sales tax, a value added tax, and a personal expenditure tax. The three taxes create the same tax on an item of consumption through different methods. These options will be discussed in comparison to the current income tax on the basis of administrative efficiency, equity, economic consequences, and transitional difficulties.

The flat tax, which has been discussed significantly in tax reform debate, will not be discussed due to its similarity to the current tax system. The flat tax proposed by Forbes and other political candidates, while a

consumption tax in substance, appears in form to be an income tax to most Americans. Due to its appearance as an income tax, the flat tax maintains the psychological drawbacks of the income tax, which are discussed later. Due to its difference in form from the other consumption taxes to be discussed, the flat tax will not be discussed.

Definitions

In order to discuss methods of taxation without confusion, several basic terms must first be defined. Administrative efficiency is the ease with which a plan can be run and complied with. A plan is said to be more administratively efficient if it is simple to apply and to comply with. This may be determined by such factors as the cost of administration and compliance, the number or size of government agencies involved in administration, and the number and complexity of the forms to be filed.

Equity is made up of several components including horizontal equity, vertical equity, and transitional equity. Horizontal equity is the ideal that states that persons in equal position should be affected equally by a tax. In order for a tax to be horizontally equitable it must not change the relative financial position of those subject to the tax. Vertical equity states that a tax burden should be distributed among the taxpayers subject to their ability to

pay. Vertical equity is closely tied to the more common concept of regressive taxation. A tax that is regressive lacks vertical equity because it takes a larger part of the lower income individuals' disposable income (income after the payment for necessities). A progressive tax, on the other hand is vertically equitable because it distributes a larger portion of the tax to the wealthy who have the ability to pay the tax with little impact on their standard of living. These terms are not to be confused with a progressive rate schedule, which is a rate schedule in which the rates rise in relation to wealth. While a progressive rate schedule may create a progressive tax, it may not if there are significant deductions that reduce taxes on the wealthy. A progressive tax increases the actual tax burden as income increase while progressive rate schedule increases the stated not necessarily the effective tax rate. Transitional equity is the fairness of the change from one system of taxation to another. This includes the need to avoid double taxation due to changing tax bases.

Consumption Taxes: In General

There are characteristics that all consumption taxes, from retail sales to personal expenditure, have in common. The common characteristics are frequently the arguments in support of a consumption tax. One of these shared qualities

is the effect that consumption taxes would theoretically have on savings rates. It is believed that replacing the income tax with a consumption tax would increase the savings rate. Many economists believe that an increase of the saving rate would lower interest rates and lead to an increase in investment. This increase in investment in capital would allow for more efficient production and real growth of the economy. The savings rate in the United States is a meager 18% making it one of the lowest of the industrialized nations. The United States also has one of the lowest annual rates of real GDP growth (Thorning 7). With few exceptions, the savings rate appears to have a direct relationship to economic growth. A consumption tax may increase the rate of savings and, thus, create economic growth. This translates to a higher standard of living for the average person. While most economists believe that the consumption tax would increase savings, some still cite the theoretical possibility that savings may decrease. This is because the real cost of consumption has increased and a larger portion of income, therefore, must be spent in order to enjoy the same consumption patterns. If people are determined to continue their current consumption patterns, they will spend more and save less than they currently do. The extent to which the chain of events would occur and increase the standard of living is hard to say because of

the number of unknown factors that may effect the impact of the change.

There are two theories that attempt to explain why a consumption tax would increase the savings rate. A consumption tax that would raise the same revenues as the current income tax may increase savings by redistributing wealth to individuals with a high propensity to save (Chawla 143). This redistribution would happen in transition from the income tax to a consumption tax as taxes on low-savers increase and tax on high-savers decreases. High-savers, thus, are permitted to keep a larger portion of their money, which they will in turn save. By redistributing wealth to high savers, more of the money will rest in the hands of people who will save and invest that money.

The consumption tax may also increase saving by inducing people on average to save a larger percentage of their income. By imposing a tax on consumption, the cost of consuming is increased relative to saving. People may then substitute saving for consumption as the relative costs change (Chawla 143). This effect may be magnified by the removal of the income tax's disincentive to save. Under the income tax nominal returns on investments are taxed. Thus, an investment that grows at the rate of inflation will, in present value terms, return less than its original value after taxes are considered. The real buying power of the

money is, therefore, reduced. The income tax, through this reduction in real return on investments, favors current consumption to saving and consuming in the future.

The disincentive to save can best be seen through a simple two year example. If two individuals both earn $10,000 per year but individual A spends all income in the year earned and individual B saves the first year's income and spends the entire-after tax income in year two, they should all have the same real purchasing power unless taxes interfere with their returns. Assuming that money is invested and borrowed at the rate of 5% (the rate of inflation), Table A shows the effects of an income and consumption tax on the two individuals. For the individual who spends as he earns, the tax is the same under both tax plans. Individual B, the saver, ends up

Table A

		Year 1	Year 2	Present Value (at 5%)
Individual A				
	Earnings	$10,000	$10,000	$19,524
	Income tax	$2,000	$2,000	$3,905
	Consumption tax	$2,000	$2,000	$3,905
Individual B				
	Earnings	$10,000	$10,000	$19,524
	Investment return under IT		$400	$381
	Investment return under CT		$500	$476
	Income tax	$2,000	$2,080	$3,981
	Consumption tax	$0	$4,100	$3,905

paying higher tax in real and nominal terms. Individual B is, thus, punished under the income tax for his thriftiness. Under the income tax, savings is punished with higher taxes and current consumption is, thereby, favored. The Consumption tax, on the other hand, charges the same tax in real terms regardless of cash flow patterns. The difference in taxes under the consumption tax is based on the amount of lifetime consumption.

In addition to distorting consumption versus savings decisions, the income tax also creates a disincentive to work. An income tax reduces the actual benefit of an additional hour of work by reducing the real wage for the additional hour by the amount of the tax. As the return from labor declines, individuals will more frequently opt for the alternative, leisure time. The graduated tax rates of the current income tax accentuate this disincentive by taxing people most when they require the greatest return from their labor, the last few hours of work. While most people would work less due to the diminished return, some may opt to work more in order to achieve a desired standard of living at the lower return rate. Consumption tax does not distort work versus leisure decisions like the income tax.

Sales Tax

"A sales tax is a levy imposed upon the sales, or elements incidental to the sales, such as receipts of them, of all or a wide range of commodities." The sales tax is one of the oldest forms of taxation known to exist, dating back to the Roman Empire which imposed a tax on the sale of slaves and certain commodities (Due 3). Since that time the sales tax has been used in a variety of forms.

Sales taxes can be broken down into groups along several different lines. One means by which the sales tax may be categorized is by the items that are taxed. A general sales tax imposes a levy on the transfer of all or substantially all goods. A use tax charges for the initial use of a taxable good that was purchased outside the taxing region. An example of this is the five-hundred dollar charge that Florida levies on any motor vehicle to be licensed in the state if brought from another state. If a government imposes a sales tax only on certain goods such as alcohol and tobacco, it is known as an excise tax. Excise taxes are used not only to raise funds but also to discourage the use of less socially desirable products.

Sales taxes can also be classified according to the way in which they are collected. Taxes collected at various stages of production are known as multiple stage sales taxes. Sales taxes that are collected at only one point are

considered single stage. The collection of the levy in a single stage tax usually occurs at one of three points: the sale of the completed good by the manufacturer, the sale by the final wholesaler, or the sale to the consumer. The most desirable of these options is the tax of the good at the point of sale to the consumer, retail sales tax.

Any single stage sales tax intended to replace the income tax must not only tax substantially all goods, but must also, for administrative purposes, be imposed at the retail level. The imposition of the tax at the retail level carries a host of advantages over the imposition of the tax at the manufacturing or wholesale level. A study commissioned by the treasury department explored the three options and rated them from best to worst in a number of areas based on ease and cost of administration and public response. A tax at the retail level was consistently rated as the best option by this study (Blakey 49).

A tax at the retail level offered the simplest solution to the possible problem of pyramiding of tax (taxing that which has already been taxed and taxing previously imposed taxes). Since a product may go through several manufacturers or wholesalers, forms must be created and filed to avoid pyramiding of tax. The retail tax does not require this paperwork because there is only one retail sale of a good. A retail tax also offers the easiest inclusion

of services and of second hand goods under the tax. Since there is no manufacturer of services or second hand goods and they frequently do not go through wholesalers, they would not be included under a tax at the manufacturing or wholesale level.

Retail taxation also removes the problem of valuation of goods which may arise under the other alternatives. It is difficult to place a value on goods before they reach the marketplace. Some may try to impose a tax on the price paid to the manufacturer by the wholesaler or on the payment to the wholesaler by the retailer. This plan may work in an economy of independent manufacturers, wholesalers, and retailers but it would lead to tax avoidance in the United States and most industrialized nations. Many companies are made up of a combination of manufacturing, wholesaling, and retailing operations. By reducing the transfer price from one segment to another a company could reduce its tax burden. This would place large companies at a considerable advantage over independent manufacturers, wholesalers, or retailer who are forced to pay the entire amount of the tax while competing with companies that pay substantially lower taxes.

The government must determine not only the level at which to impose the tax, but also what items to tax. Neither an excise tax nor a use tax would raise the funds

necessary to replace the federal income tax. The only sales tax with the potential to replace the income tax is the general sales tax. Without substantially all goods being included in the tax, consumers will be able to adjust their consumption patterns to avoid what would be the highest tax they have ever seen on the transfer of goods. This is especially true if the tax is imposed at the retail level.

If only selected goods are taxed at the retail level, the extent of the tax will be evident to consumers and they will choose other goods or increased savings instead. This will cause the demand for the taxed goods to fall along with tax revenues. Any attempt to increase the tax rate to compensate for the decreased demand will cause demand to fall even further. This would eventually cripple the industry that is taxed and may eliminate the taxed industry all together.

The retail sales tax also offers substantial benefits over the valued-added tax and personal expenditure tax. Among the benefits of the sales tax is the ease of transition to this system. Residents of nearly all states are accustomed to a retail sales tax and, therefore, should already understand it. With nearly all states currently imposing a retail sales tax the federal government could merely establish a tax rate and basis and leave the collection of the tax to the states. Retailers would

collect and remit the taxes to the state which would foreword the funds to the federal government

The retail sales tax is also one of the most administratively efficient proposals for tax reform. The replacement of the income tax with a retail sales tax, would allow for the dissolution of the Internal Revenue Service. The task of collecting the tax could be handled by state agencies which are already in place. This would consolidate the collection of taxes. The sales tax offers less opportunity for tax avoidance and manipulation, thereby reducing the need for expensive audits and prosecutions. The savings from audits and prosecution may be counterbalanced by the loss of tax dollars through the increase in unrecorded, and untaxed, transactions. This is especially true for transactions involving the sale of services. Overall the cost of administration of and compliance with a national sales tax would be very low compared to the expense for the alternatives.

A sales tax imposed at the point of sale is also visible to tax payers. This understanding of how the tax works and clear view of its impact on them allows consumers to make truly informed decisions. This may be the closest to perfect information that the American people have ever seen in a tax system. Under most other tax systems the tax is either hidden from the taxpayer or is too complicated to

compute the tax's affect on the results of a particular action.

While a national sales tax offers these advantages over other systems, it has some serious faults as well. The visible nature of a sales tax may also cause greater impact on the spending habits of consumers than would be beneficial to the economy. While many economists agree that the United States' savings rate is lower than is ideal, most would also agree that too great of a shift away from consumption may also be damaging. Even though the actual tax and product cost may be the same as under alternative systems, the visibility of the tax may cause a greater shift toward savings than other consumption taxes.

While the federal government could place the responsibility for collecting a sales tax on the states, it would cause a great deal of political unrest. This would be the most expensive mandate the federal government has ever placed on the states. Given the recent trend of states challenging the federal government's power to require actions of states without paying for them, states may challenge the right of the federal government to impose the cost of collecting its taxes on them. Even if the federal government allowed the states to keep a percentage of the receipts, it is unlikely that the portion staying with the states would cover their costs. This is especially true for

the five states that do not have a sales tax and would, therefore, have to create a system for the sole purpose of collecting federal taxes. Under the Articles of Confederation the states were responsible for collecting taxes for the federal government but were unwilling to do so. There is no reason to believe that the states are going to be any more receptive to the idea of doing the federal government's work than they were two-hundred years ago.

A general sales tax, in its base form, is quite regressive. Lower income families are required to pay a larger percentage of their income in taxes because they must spend a larger part of their income on necessities while wealthier individuals spend less income on necessities and can, therefore, choose to save part of their income rather than buy luxuries. This regressive nature may be compensated for through the exemption of certain necessities such as food and clothing. While correcting the regressive nature, this creates a series of legislative problems. The lawmakers must then decide what is food versus candy and clothes versus costumes and accessories. Where is the line to be drawn regarding the nutritional value of food and protective nature of clothing? By exempting necessities, the legislature is only opening the door for a host of manufacturers to claim that their good is a necessity. This would place on the courts the burden of deciphering laws and

interpreting what the Congress intended to exempt from the tax. While this is not altogether different from the debates that happen at the state level, the problem may be increased significantly due to the greater impact of the tax. A company is more apt to challenge its classification for a federal income tax than for a state's tax because the federal tax rate would be much higher and the number of people subject to the tax would also be greater. This increased rate and scope make classification as a necessity much more beneficial.

In addition to the legislative problems that the sales tax creates, it may also lead to the rise of an underground market for the purpose of avoiding a national sales tax. With a national sales tax of ten percent (lower than most economists project would be needed), sales in many jurisdictions would be subject to local, state, and federal taxes of more than twenty percent. Legal transactions that currently occur in the open would go underground to lower the cost of the good by approximately seventeen percent. A larger segment of taxable transactions would go unrecorded and tax revenues would, therefore, be much lower than expected. This has been the experience of Canada and most other developed nations that have attempted to impose a sales tax at some level. Of the twenty-one nations that had a sales tax in 1967 twenty have changed to a value-added tax

(Armey 3). Given the sales tax's poor track record in European nations with economies similar to that of the United States, it is unlikely that the sales tax would fare much better in the United States.

Value-added Tax

Nearly all nations that have attempted to implement a sales tax have changed to the use of a value-added tax (VAT). This is a logical transition due to the economic similarity of the two taxes. The VAT is in essence a modification of a multistage sales tax. The VAT, like a multistage sales tax, imposes a levy on the transfer of goods from one holder to another. The VAT differs from the sales tax in that it imposes a tax only on the value added to the product by the transferor. If the VAT is imposed through the retail level, the effect will be a tax on the same base as a retail sales tax but to do it in several steps.

At each step in the production and transfer of goods to retail, a VAT is paid. This tax can be calculated through a number of methods dependent upon the standards set by the government. One of the first decisions when designing a VAT is whether the taxable base should be tax inclusive or exclusive. A tax inclusive base means that the tax owed is the product of the tax rate and the total base, which

includes the value added and the tax owed. This may be expressed algebraically by the formula:

Tax = stated rate * (tax + value added).

Through manipulation, this becomes:

Tax = (stated rate * value added) / (1 - stated rate).

Since the effective tax rate is the tax divided by the value added, a tax inclusive system will raise the effective tax rate above the stated rate as long as the stated rate is less than 100%. For a stated rate of twenty percent the effective rate would actually be twenty-five percent. A tax exclusive method on the other hand does not include tax due in the taxable base and is, therefore, just a product of the stated rate and the value added. The stated and effective rates are the same in a tax exclusive system. The effect of a tax inclusive and exclusive base are the same, only the effective rate at a given stated rate varies between the options.

Regardless of whether a tax exclusive or inclusive system is chosen, several choices must also be made with respect to the calculation of the value added and the tax on the value added. In calculating the value added one of two methods, additive or subtractive, may be used. The additive method takes the simple approach to deriving the value added. Value added is calculated as the sum of wages and profits at a stage of production. This appears simple to

most accountants because wages and profits are concepts that are handled regularly. Although simple, this may force the VAT to be implemented as a quarterly tax rather than a monthly tax, as is normal for most taxes, because most companies only compute their profits on a quarterly basis. As an alternative, the value added could be computed on a subtractive basis. The value added would be equal to the value of output minus the value of physical inputs. In theory the two means of determining value added are identical yet all nations with a VAT have specified which method must be used.

The government must also determine the method of handling the cost of long term assets. Long term assets benefit many accounting periods and, therefore, may logically not be written off in a single period. For simplicity sake the government may require the write off of an asset's purchase in the period which it was acquired. The other option when designing the expensing of long term assets is to allow their cost to be depreciated over the life of the asset. Under the immediate expensing method, the entire price of the asset is recorded as a cost of the assets produced in that year. The value added for the products produced and sold in the period of the purchase would be artificially low and little tax would be due. Immediate expensing is much simpler for computation and

benefits new businesses by reducing their taxes in the early periods of operation, when many large purchases are made. Depreciation of the asset cost seems more likely because it coincides with generally accepted accounting principles and is politically more acceptable.

Finally, the government must decide whether the tax is to be computed directly or indirectly. Direct computation of the tax first requires the calculation of the sales and purchases. From these figures the value added is determined and the tax rate is applied to this taxable base to calculate the tax owed. The indirect method, conversely, calculates the tax due on the sales and deducts from this the tax which has already been paid on the purchases. The two systems differ only when multiple tax rates are used for different stages of production. While both methods are effectively the same, the indirect tax, by calculating the tax on the sale separately, emphasizes the sales tax nature of the VAT. This has the advantage of being viewed as a sales tax under the GAAT. If perceived as a sales tax, the government can offer a rebate of the tax on exported goods, an option not open to the VAT if calculated directly as a tax on wages and profits.

An example may clarify how a VAT would work. A producer makes 1,000 dishes using only clay, which is provided for free, and labor of $5 per dish. These dishes are then sold

to a wholesaler for $8,000. This wholesaler then sells the pots to a retailer who sells them to consumers for $15 each.

Party	Purchases	Sales	Value Added	VAT (15%)
Producer	$0	$5,000	$5,000	$750
Wholesaler	$5,000	$8,000	$3,000	$450
Retailer	$8,000	$15,000	$7,000	$1,050
Total			$15,000	$2,250

In this example each party pays the VAT on the value added in its step in bringing the dishes top the consumer. Under the self-enforcing invoice method discussed below the retailer would be responsible for the entire $2,250 of tax but would receive a credit for any taxes it could show that the producer and wholesaler had paid on these dishes.

A value added tax is particularly administratively efficient when an indirect subtractive system is used. By assessing a tax based on sales and giving a deduction for taxes paid at previous stages of production (invoice method), this system makes handlers of the goods tax collectors for the parties from which they were purchased. If a company fails to verify that the seller has paid and invoiced the proper tax on the goods, they must pay the tax which the seller should have. This makes governmental enforcement of the tax simple, and evasion by a manufacturer in the intermediate stages difficult. Unlike the retail

sales tax, the VAT does not create the significant advantages of unrecorded retail transactions. By trading in the black market the buyer only avoids the tax on the mark up to retail but the majority of the tax has already been paid. Overall, the value added tax is an easy tax for the federal government to administer at a low cost.

While most of the decisions on how to compute the tax have little impact, the use of a VAT may itself have significant advantages over other taxing methods. The VAT, since it is usually collected on a manufacturer's monthly value added, would require fewer transactions for taxing purchases. Each manufacturer or wholesaler would be taxed only once for their entire month's operations. This is much more efficient than a sales tax that must be calculated for each retail sale of goods or services. In limiting the number of taxable transactions, the VAT becomes removed from the individual products and, in turn, the consumer. Without a clear view of the tax, taxpayers do not associate the tax with the underlying economic activity and the theoretical benefits of a consumption tax may not be realized.

The value added tax also claims a significant advantage over many tax plans, including the current income tax and flat tax proposals, in that it is economically neutral. The VAT is seen as neutral by economists because it does not change the relative cost of rent, wages, and capital

investments (machinery), or the relative value of profits and returns on investments. The tax on the return on labor (salaries and wages) is equal to the tax on the return on capital (rent, interest, and profits), thereby, eliminating the tax preference of labor or capital over the other. The current income tax increases the relative cost of labor and decreases the relative value of profits by taxing both more heavily than their substitutes, capital and return on investment respectively. This influences businesses to invest in capital rather than labor which may keep wages low and interest rates artificially high. The VAT may, furthermore, remove the subsidization of inefficiency by removing the incentive to invest in capital over labor by removing the deduction of interest for tax purposes. By removing the incentives to favor one factor of production over another, the VAT allows the economically efficient combination of capital and labor rather than the financially efficient mixture.

Many social scientists feel that the advantage of an economic efficiency is outweighed by the fact that the VAT is naturally regressive. Because the VAT is, in its simplest level, a flat-rate tax levied on all goods, lower income consumers will pay a higher percentage of their income as tax. This is true if the tax is left in its simplest form because lower income consumers must spend a

larger part of their income while the wealthy can, and usually do, save a larger part of their income. The regressive nature of the tax can be overcome in much the same way as the regressive nature of the sales tax. By rebating the VAT paid on an exempted item (i.e., food, clothing, or medicine), the price of the item would reflect the lack of taxes paid. This is somewhat more difficult than exempting items from the sales tax, but has been done in most European nations. This is because many items that go into necessities are also components of luxuries and would, thus, be taxed in some applications and not others. The exemption of certain "necessities" will also raise the same issues in defining what are necessities as the retail sales tax. Overall, the exempting of certain items is the same for the VAT and the sales tax.

One of the main advantages of a value added tax is that most of the United States' major trade partners have a VAT of one form or another. In order to take full advantage of this benefit the United States must implement a tax as similar to those used by its trade partners as possible. Most European nations have chosen to use a subtractive, tax exclusive, indirect method of calculating the tax liability. In order to integrate fully with its major trading partners, the United States should do the same.

Politicians who favor the value added tax argue that it will encourage exportation and reduce the trade deficit. This appears to be logical because exported goods will receive a tax rebate and imported goods will be taxed when they enter the country. This would create parity between United States taxation and the tax policy of its major trade partners as most trade partners have a VAT which is rebated on exports and imposed on imports. While this would reduce the taxes paid on exports, many economists believe that it would have little impact on the balance of trade. This may be due in part to the belief that exchange rates will shift to compensate for the imbalance in trade (Weidenbaum 51). A shift in interest rates would, over the course of several years, return trade to its previous levels, *ceteris paribus*. The change to a VAT would, therefore, only increase exports for the first few years of its use and would result in a temporary decrease in exports if the tax is repealed.

It is difficult to predict with any certainty the impact of a change from the income tax to a value added tax because no nation in the past has made such a move. Historically, the VAT has been used only as a supplement to the income tax as part of a complex network of taxes. Most of what can be said of the impact is logical inferences from the VAT's effects in its current application and from

interpretation of economic models which make assumptions of economic and personal behavior.

Personal Expenditure Tax

The personal expenditure tax has been discussed greatly by tax theorists, but has seen little use in the real world. Nicholas Kaldor, a leader in the study of consumption taxes, proposed that the personal expenditure tax be used to replace the surtax in the United Kingdom and supplement the income tax for high income individuals in India (Chawla 146). While the U.K. never adopted the personal expenditure tax, India followed the recommendations of Kaldor and incorporated a tax on expenditure into their complicated tax system in 1957. After four years the tax was suspended due to disappointing revenues. The tax was reinstated with limited exemptions in 1964 and abolished completely two years later. The tax was finally abolished because the yield from the tax was too low to justify the administrative and compliance burden it created (Chawla 148). Even though the expenditure tax failed in India, it is not necessarily a failure. India, due to its low literacy rate and developing economy, may not have been the ideal testing ground for a tax which requires the book-keeping, calculations, and filing of the expenditure tax. The expenditure tax may

prove much more successful in a nation with a developed economy and more educated population.

The personal expenditure tax, as recommended by Kaldor, most purely taxes economic expenditure. The personal expenditure tax imposes a tax on all expenditures. Consumption need not be computed by recording every transaction and totaling these outlays at the year's end. It can be simply derived from a modification of the Haig-Simon definition of income (Income = Consumption +Savings) (Anderson 77). Through manipulation of the Haig-Simon income formula, consumption can be calculated as C = I - S. For an individual with income of $30,000 and an increase in savings of $10,000 the tax would be assessed on the base of $20,000 (30,000 - 10,000). For an accountant the tax can be computed similarly as:

C = Income + Beginning Savings - Ending Savings.

In 1977 the Treasury Department developed this formula even further, and produced the following:

Consumption = Income (cash & noncash)
+ Gifts & Inheritances received
- Gifts & Bequests given
- Costs of earnings
- Other Deductible Outlays
- Savings (Anderson 77).

The preceding formula explains precisely how consumption and the tax on it may be calculated.

In defining the consumption base for a potential consumption tax, the Treasury Department showed how an

expenditure tax may be calculated in the United States There has been little effort by the government since that time to move toward a general expenditure tax. The 1977 formula, therefore, represents the best indication of what a personal expenditure tax may look like. The Treasury Department defined income as receipts including wages, benefits of employment, interest, dividends, and proceeds of asset sales (Anderson 77). The inclusion of gifts and inheritances received and the exclusion of gifts given were an area of great controversy and, therefore, left unresolved by the Treasury Department. The cost of generating income is deducted from income in order to calculate income. The government has, for reasons of public policy, allowed deductions from taxable income for certain expenditure including medical expenses, charitable contributions, and state taxes. This policy could be continued under an expenditure tax by not including payments for these items in consumption. Finally, savings would include increases in savings account balances and the cost of assets acquired.

The Treasury Department advised the implementation of a cash flow model to calculate the tax base. The cash flow model would treat expenditures in one of two ways dependant upon their characteristics. Savings through accounts would be exempted using the cash flow method. The cash flow method allows for contributions to "qualified accounts" to

be deductible from the tax base while withdrawals would be taxed unless reinvested. This method is particularly well suited to savings accounts, stocks, bonds, and other investment accounts (Anderson 78). Investments in "qualified accounts" would be treated much as individual retirement accounts are under the current income tax. Treatment of investments under an expenditure tax would differ from that of IRAs in that there would be no limit on contributions and no penalty beyond normal taxation for withdrawal.

The Treasury has recommended a prepayment method of exempting saving for large consumer purchases (e.g., homes, cars, and appliances) because, unlike financial investments, they do not yield cash returns (Anderson 78). The returns of these items are to a large extent the daily benefits of their service. In order to tax the consumption of the durables under the cash flow method owners would have to amortize the value of the asset over its expected period of benefit. The purchase price would be deducted at the time of purchase and the benefits taxed over the life of the asset. The prepayment method simplifies this by taxing the good when purchased and exempting the benefits of the investment from taxation. Thus, the taxes for the lifetime benefits of a durable asset would be taxed at the time of purchase. This yields the same tax as the cash flow method

On the average, there would be no gain in an individual's tax burden.

One of the main concerns of expenditure tax opponents is the difficulty that the government would have in collecting the tax. Unlike income, there could be no standard formula that an employer could use to accurately predict an individual's tax bill. A consumer's tax bill may fluctuate greatly from one year to another based on factors that may be hard to predict. This would make withholding taxes difficult for employers and extremely inaccurate. Much of the fluctuation in consumption is attributable to purchases of large items with savings. While Congress could withhold tax on withdrawals from qualified accounts to offset the tax due on these large purchases, it is unlikely that they would do so. In the past Congress has been reluctant to impose withholdings on interest and dividend income, which is closely related to saving. Congress could, therefore, not be expected to require withholdings in this situation. Withholdings would most likely come from wages alone (Anderson 82). While this may prove problematic, it does not compromise the value of the tax. A Congress revolutionary enough to change the entire tax structure may well be daring enough to require withholdings on withdrawals.

Conclusion

While consumption taxes have significant advantages over the income tax, they also have shortcomings of their own. One of the major problems in changing to a consumption tax is that it will require many states to rewrite their income tax bases or change their tax structures altogether. Many states use adjusted gross income from the federal tax form as the base for their taxes. These states would incur a great expense in the transition to a new tax system. In addition to the problems of rewriting the tax code, there would also be a period of adjustment and learning for the filers. During this period, the cost of filer assistance and review of returns would rise temporarily before dropping back to a constant level.

Consumption taxes also face political opposition because of they appear to favor the wealthy. Wealthy appear to be benefited more than others by consumption taxes because they have the greatest potential to save. With the current mindset of taxes being computed as a portion of income, it would appear to many that the effective tax rates on the wealthy are lower. Despite the effects of a graduated tax rate for consumption taxes, many voters would still consider the tax a gift to the wealthy. With this in mind, it is unlikely that there will be a political push for the change.

Transition to a consumption tax, if done in a single step, would cause many taxpayers to be effectively taxed twice. Those taxpayers who saved money in the past were taxed on those savings when earned. When they draw on those savings to make purchases, the purchase price will be taxed through an expenditure tax, sales tax, or VAT. An individual who made purchases on credit shortly before the transition may conversely pay no tax. It can hardly be considered equitable to tax people twice because they saved their earnings to make a purchase rather than buying items with future earnings. This could be solved by offering rebates for purchases that were paid for with pre-consumption tax savings. This would create an astounding amount of paperwork for the tax collecting body to process. It may also leave an opening for manipulation of the system. The cost of such a transition, both in administration and lost revenues, would be so high as to outweigh the benefits. More simply, the consumption tax could be introduced gradually in conjunction with gradual reductions in income tax rates. If implemented over a three to five year period, taxpayers would have more time to adjust and react to the change. While some consumers would lose and others gain from the change, the effects would be spread out and the impact less dramatic. The economy would also have time to adjust rather than feeling the entire impact as a single

blow. This may reduce the temporary trade benefits of the transition to a VAT. There is no denying that there will be inequities in any transition to a consumption tax, but the effects may be spread out to minimize the impact.

Consumption taxes have significant benefits over the income tax that would stimulate economic growth and simplify the tax codes. The benefits of consumption taxes are too great to be dismissed. The disadvantages of consumption taxes, on the other hand, are primarily political and transitional. Due to the nature of objections to consumption taxes, they do not effect the benefits of consumption taxes. Given the shortcomings of the income tax and Congress' historic inability to solve problems in the tax code through modification, it may be time to replace the income tax with something better. Consumption taxes may be the best replacement for the outdated income tax.

Perhaps the best of the options for a consumption tax is the personal expenditure tax. The retail sales tax fails to be a viable option due to its incentive to trade in an underground economy to avoid the tax. This underground economy defeats the purpose of the tax. Most nations that have used a sales tax have shifted to a value added tax for this reason. The value added tax has drawbacks of its own. The primary drawback of the VAT is the fact that it is hidden from consumers. The hidden nature of the VAT leads

consumers to believe that the burden is borne by someone else. This leads to uninformed consumers. Many politicians would respond that the benefit of adopting a tax policy similar that of most of our trade would be a significant enough advantage to outweigh the disadvantages. This assumption may be true in the first few years after the transition but not in the long run. Over time exchange rates would reflect the change in tax policy. Differences in tax structures are not a difficulty over time because exchange rates will adjust to compensate for the difference.

The personal expenditure tax has significant advantages over other consumption taxes. Table B outlines the differences between the consumption taxes.

Table B

	RST	VAT	PET
Who Remits	retailer	producer/wholesaler retailer	consumer
Ease of Compliance	easy	med/easy	med/difficult
Cost	low	med/low	med/high
Progressiveness	medium	difficult	easy
Transitional Equity	difficult	difficult	medium
# of Transactions	high	medium	low
Current use	cities, states	nations	none
Major Con	Rise of Black Market	Complexity	Uncertainty Withholdings Difficulties
Major Pro	visibility simplicity	conformity with trade partners	purity

The personal expenditure tax not only has the advantage of being economically pure, but also has functional advantages over the alternatives. The personal expenditure tax easily overcomes its regressive nature through the addition of a standard deduction. The economic purity of the expenditure tax and its ability to overcome its regressive nature outweigh the uncertainty of the tax. The personal expenditure tax is, therefore, the best consumption tax option for the United States.

Bibliography

American Council for Capital Formation. The Consumption Tax: A Better Alternative?. Ed. Charles E. Walker, and Mark A. Bloomfield. Cambridge: Ballinger, 1987.

Anderson, Kenneth E. "The Consumption Based Income Tax: An Old Idea Is Receiving Renewed Attention." Journal of Accountancy June 1994: 77-82.

Armey, Richard K. "Caveat emptor: The Case Against The National Sales Tax." Policy Review [online]. Summer 1995. http://sbweb2.med.iacnet.com/infotrac/session/889/267/1765561/21?fullart_.

Blakey, Roy G. and Gladys C. Blakey. Sales Taxes and Other Excises. Chicago: Public Administration Service, 1945.

Bradford, David F., et. al. Blueprints for Basic Tax Reform. Arlington, VA: Tax Analyst, 1984.

Brookings Institution. What Should Be Taxed: Income or Expenditure?. Ed. Joseph A. Pechman. Studies in Government Finance. Washington, D.C.: Brookings Institution, 1980.

Chawla, O.P. Personal Taxation In India: 1947-1970. Bombay: Somaiya Publications Pvt. Ltd., 1972.

DesRochers, Christian. "Consumption Tax Proposals Can Alter Future of Insurance." Best's Review of Life and Health Insurance April 1996: 59-62.

Duarte, Joseph S. The Income Tax Is Obsolete. New Rochelle, N.Y.: Arlington House Publishers, 1974.

Due, John F. Sales Taxation. Urbana, IL: University of Illinois Press, 1957.

Fellows, James A. "Consumption Taxes: A View of Future Tax Reform in America." The CPA Journal 64.4 (April 1994): 28-34.

Garber, Harry D. "The Role of Consumption Taxes in Tax Reform Around The World." National Tax Journal 41.3 (Sept. 1988): 357-364.

Goodgame, Dan. "How To Simplify The Crazy Tax Code." Time April 20, 1992: 48-49.

Lindholm, Richard W. The Economics of VAT. Lexington, MA: Lexington Books, 1980.

Makin, John H., ed. Real Tax Reform: Replacing the Income Tax. Washington, D.C.: American Enterprise Institute for Public Policy Research, 1985.

McLure, Charles E., Jr. "Economic, Administrative, and Political Factors In Choosing a General Consumption Tax." National Tax Journal 46.3 (Sept. 1993): 345-358.

---. "Substituting Consumption-Based Direct Taxation for Income Taxes as the International Norm." National Tax Journal 445.2 (June 1992): 145-154.

McLure, Charles E., Jr. and Norman B. Ture. Value Added Tax: Two Views. Washington, D.C.: American Enterprise Institute for Public Policy Research, 1972.

Mubaraki, Firdos J. Changes Needed In Economic Policies. Concord, CA: Peace Publishers, 1987.

Norton, Rob. "The Tax Idea That Won't Go Away. Fortune May 17, 1993: 77-80.

Sabelhaus, John. "What is The Distributional Burden of Taxing Consumption?" National Tax Journal 46.3 (Sept. 1993): 331-344.

Sarkar, Shounak, and George R. Zodrow. "Transitional Issues in Moving to a Direct Consumption Tax." National Tax Journal 46.3 (Sept. 1993): 359-376.

Seidman, Laurence S. "A Better Way To Tax." The Public Interest Winter 1994: 65-72.

---. "Boost Savings With A Personal Consumption Tax." Challenge Nov./Dec. 1989: 44-50.

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

Tait, Alan A. Value Added Tax. London: McGraw-Hill, 1972.

Taylor, Peter M. "Saver's Tax Relief: Revisiting a Good Idea." National Tax Journal 46.3 (Sept. 1993): 323-330.

Thorning, Margo. "Looming Budget Deficits: Can Tax Reform Help?" American Council for Capital Formation Center for Policy Research Special Reports [online]. June 1996.
http://www.accf.org:80/loombudgtdefs.html

Weidenbaum, Murray. "An Alternative To The Income Tax." The American Enterprise 3.6 (Nov. 1992): 48-55.

---. "Should We Tax Consumption." USA Today (Magazine) March 1993: 16-19.