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TAXES AS POLICY

A Progressive Consumption Tax

Laurence S. Seidman

Even those who believe that a tax on consumption would raise the nation's savings are disturbed about a consumption tax's effects on the distribution of income. The author discusses the proposed USA Tax, which he thinks can be progressive and encourage savings as well.

In April 1995, Senators Pete Domenici (R, NM), Sam Nunn (D, GA), and Bob Kerrey (D, NE) introduced the USA (Unlimited Savings Allowance) Tax bill. Its introduction represents a milestone in the story of the personal consumption tax that began with the publication of two monographs a half-century ago—*Constructive Income Taxation* (1942) and *An Expenditure Tax* (1955)—and continued with the publication of two studies twenty years later: *Blueprints for Basic Tax Reform* (1977) by the U.S. Treasury's Office of Tax Analysis and *The Structure and Reform of Direct Taxation* (1978) by the U.K.'s Institute for Fiscal Studies. I bring the story up to date in my recent book (Seidman 1997), and show its relation to social insurance policies in my forthcoming book (Seidman 1998).

Like other consumption taxes (the national retail sales tax, the

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value-added tax [VAT], and the flat tax), but in sharp contrast to the income tax, the USA Tax would encourage saving and investment. But unlike these other consumption taxes, the USA Tax would not shift the tax burden from the affluent to the non-affluent; it would achieve as much progressivity—top to bottom—as the current income tax by using a set of sufficiently graduated rates in its household consumption tax. The two key properties of the USA Tax—encouraging saving while maintaining progressivity enable it to attract bipartisan sponsorship and support.

The USA Tax has two components: a household tax and a business tax. The household tax is essentially a personal consumption tax because all saving is tax deductible: There is an unlimited savings allowance. Thus, the personal income tax would be converted to a personal consumption tax. The business tax is a subtraction-method value-added tax, so the corporate income tax would be converted to a VAT. This article focuses exclusively on the household (personal) tax, which is intended to raise roughly four-fifths of USA Tax revenue.

Under a progressive personal consumption tax, each household is taxed on its consumption, not income, at graduated rates. On its annual tax return, the household computes its consumption for the past calendar year: It sums this year's cash inflows and subtracts this year's non-consumption cash outflows; what is left is consumption. All saving is therefore tax deductible in the year in which it occurs. Sufficiently graduated rates keep the distribution of the tax burden between the affluent and the non-affluent roughly the same as under the current income tax.

Saving

One basic reason for converting the personal income tax to a personal consumption tax is to raise the national savings rate.

Table 1

	1970s	1980s	1990–92
Japan	25.6%	20.9%	23.0%
Germany	15.1%	11.2%	12.4%
France	17.1%	9.0%	8.7%
Italy	16.4%	11.2%	7.6%
United States	9.1%	5.2%	2.5%
OECD	13.8%	9.7%	8.7%

Net Saving as a Percentage of Net National Income

Source: OECD *National Accounts 1960-1992 Main Aggregates Volume I* (Paris, 1994) (percentages computed by the author).

Many Americans are unaware of two economic facts that are crucial to their future relative and absolute standard of living. First, the United States has maintained a lower savings rate than most other economically advanced countries for several decades. Second, the U.S. savings rate has declined over the past two decades. (See Table 1.) Table 1 shows net saving as a percentage of net national income for the five member countries of the Organization for Cooperation and Development (OECD) with the largest GDPs in 1992. The United States had the lowest net savings rate in all three decades by a wide margin, well below the average of all OECD countries. The net savings rate of all five countries (and the entire OECD) declined from the 1970s to the 1980s; however, in the early 1990s, Japan and Germany halted their decline—Japan at 23.0 percent, Germany at 12.4 percent-while the United States net savings rate declined to just 2.5 percent.

Saving finances investment in real capital—machinery, equipment, technology. Raising our savings rate will increase our capital stock, output, consumption, and real wages in the future.

My colleague Kenneth Lewis and I estimated magnitudes for the U.S. economy (Lewis and Seidman 1993, 1994). We fitted a translog production function to the data of the U.S. economy

for the four most recent decades and then simulated an increase in the U.S. investment rate. We focused on the private gross investment rate, initially about 15 percent, and analyzed a phased increase to 18 percent (a 20 percent increase) over three years to allow time for the economy to absorb the shift in the composition of output without a recession.

Here is what we found. While capital and output per worker rise immediately, consumption per worker initially grows more slowly, but within a decade, consumption per worker becomes permanently higher than it otherwise would have been. After five decades, output per worker is 10 percent higher each year, and consumption per worker—the standard of living—6 percent higher each year than it would have been without the increase in the investment rate. How great are the long-term gains

Economists agree that increasing our savings rate will achieve higher output and consumption per person in the long run. But the increase must be phased in gradually to avoid a temporary recession.

compared with the short-term losses? The investment rate return—the discount rate that makes the present value of the longterm gains equal the present value of the short-term losses—is roughly 13 percent. Finally, the real wage of low-educated labor is 3 percent higher than it otherwise would have been in a decade (4 percent higher in two decades) while the real wage of high-educated labor is 5 percent higher in a decade (9 percent higher in two decades).

Economists agree that increasing our savings rate will achieve higher output and consumption per person in the long run. But the increase must be phased in gradually to avoid a temporary recession. Here is an illustration of how it can be done. Today,

output, consumption, and investment all normally grow about 2.5 percent per year; investment (private plus public) is roughly 20 percent of output and consumption (private plus public) is roughly 80 percent. Envision a half-decade transition. During the half-decade, the aim is to keep output growing about 2.5 percent while gradually raising the share of output that consists of investment goods—for example, to 24 percent—while gradually reducing the share that consists of consumer goods—for example, to 76 percent. This will happen if consumer goods production grows about 1.5 percent per year while investment goods production grows a little over 6 percent per year.¹ From then on, both consumer goods and investment goods can grow at the same rate—a rate that will be faster than 2.5 percent for many years because of the higher capital stock that is achieved by fast investment growth during the half-decade.

During this transition, tax conversion induces the slower consumption growth, and the Federal Reserve must induce the faster investment growth. The Fed does it by reducing interest rates enough to persuade business managers to step up their orders of investment goods, thereby stimulating faster investment goods production. Total demand (consumption plus investment) and hence total output will continue to grow at its normal 2.5 percent, thereby maintaining a constant unemployment rate and avoiding recession. Thus, it is important to phase in the USA Tax (or any other consumption tax) gradually so that consumption growth declines modestly for roughly a half-decade but always remains positive. How to phase in the USA Tax is discussed at the end of this article.

A skeptic might argue that although our savings rate is low by international standards, perhaps it reflects the genuine preferences of our citizenry. I believe that it does not, for two reasons. First, several government interventions reduce our savings rate: capital gains taxes, social security, Medicare, and unem-

ployment insurance. Social insurance programs have important benefits, but they have the negative side effect of reducing savings. Second, saving generates at least three public goods that are vulnerable to the free-rider problem: (1) a higher international ranking of the future U.S. standard of living; (2) faster poverty reduction for low-skilled people willing to work; and (3) a greater contribution to the "ascent of man" through technological progress. Each citizen knows that the supply of these public goods depends on how much everyone else saves. So each citizen has an incentive to let others do it. Hence, national saving is too low and these important public goods are undersupplied.

But will conversion to a personal consumption tax actually raise the savings rate?

The answer is almost surely "yes" for three reasons: the horizontal redistribution (heterogeneity) effect, the postponement effect, and the incentive effect. Let me discuss each in turn.

Consider the horizontal redistribution (heterogeneity) effect. Imagine two persons, Saver (S) and Consumer (C), who each earn \$500,000. They are extremists: After taxes, S saves everything while C consumes everything. Under a 20 percent income tax, each pays \$100,000 in tax so total revenue is \$200,000; S saves \$400,000 while C consumes \$400,000, so total saving is \$400,000 all from S—while total consumption is \$400,000—all from C.

Now suppose the income tax is converted to a personal consumption tax. To be equally progressive, the consumption tax must again extract \$200,000 of revenue from them. Since S will owe no tax under the consumption tax, all \$200,000 in revenue must come from C, so a 40 percent tax rate will do the trick, and C will consume \$300,000. With no tax, S will save \$500,000. Hence, total saving will rise to \$500,000—all from S—while total consumption will fall to \$300,000—all from C.

What has happened? Conversion to the consumption tax has shifted \$100,000 of disposable (after-tax) income from C to S.

The shift is horizontal because C and S have equal incomes. C would have consumed the \$100,000; S saves all \$100,000. As a result, total saving rises \$100,000 and total consumption falls \$100,000. Thus, conversion to the consumption tax shifts cash out of the hands of the affluent consumer and into the hands of the affluent saver.

Of course, when people are less extreme about saving and consuming, the increase in total saving is smaller, but there is still a horizontal shift of disposable income and a resulting increase in aggregate saving. In a recent empirical study, Lewis and I investigated the heterogeneity (horizontal redistribution) effect using actual U.S. data (Seidman and Lewis 1998). We estimate that the increase in aggregate saving due solely to the heterogeneity effect of tax conversion might be nearly 10 percent.

In an economy with a growing population and growing real wages, the greater saving of workers will outweigh the greater dissaving of retirees, so aggregate net saving will increase.

Next, consider the postponement effect. Imagine that the typical person plans sensibly for retirement. He saves as a worker so that he can spend as a retiree. Conversion to a personal consumption tax will cut his tax as a worker and raise his tax as a retiree. Hence, relative to the income tax, the consumption tax postpones some of a person's tax to later in life, so the typical worker will save more and achieve a higher peak wealth at the beginning of retirement (and the typical retiree will dissave more). Since every dollar of saving generates a dollar of investment, and every dollar of wealth, a dollar of real capital, the consumption tax economy will accumulate more capital per worker than the income tax economy. Moreover, in an economy

with a growing population and growing real wages, the greater saving of workers will outweigh the greater dissaving of retirees, so aggregate net saving will increase. Hence, the consumption tax economy will have a higher savings rate than the income tax economy because tax is postponed for the typical person.

Finally, consider the incentive effect, "the substitution effect," that results from tax conversion. Conversion raises the reward for saving without making the average person richer. By contrast, a rise in the interest rate raises the reward for saving and also makes the average person richer. Economists have analyzed the effect of a rise in the interest rate, and they point out that, in theory, saving might rise or fall. Why? True, you might be inclined to save more because of the greater future pay-off of each dollar saved. Economists call this "the substitution effect." But, on the other hand, the higher interest rate, like a higher wage, has made you richer; why not consume a little more now-save a little less-and still consume a little more in retirement? Economists call this "the income effect." However, the replacement of the income tax by a personal consumption tax does not make households richer. The average household-whether high-, middle-, or low-income—pays the same tax as before. So there is no income effect for the average household, just a substitution effect encouraging more saving.

Studies of the response to limited, restricted savings allowances such as individual retirement accounts (IRAs) underestimate the impact of tax conversion. If a person weighs contributing to an IRA, he must worry about whether he will need the cash before retirement. Even if he is willing to take a chance, the amount that is tax deductible is limited. The personal consumption tax removes the worry. Save today if you can get by today. If something comes up tomorrow, you can withdraw your funds without any special penalty or restriction. Save as much as you can today; there is no limit to how much is tax deductible. Thus,

these studies cannot predict what would happen to saving under a personal consumption tax.

Fairness

Unlike other consumption taxes—a national sales tax, a valueadded tax, or a flat tax—the progressive personal consumption tax does not shift the tax burden from the affluent to the nonaffluent. It utilizes graduated rates to maintain the same degree of progressivity as the current income tax. The basic question, then, is this: Is it fairer, using graduated rates, to tax a person according to his consumption rather than his income? Income tax advocates say no, for one basic reason: They claim that income is a better measure of ability to pay than consumption is. They cite the person with a high income but low consumption. Isn't it fairer, they ask, to levy a high tax on this person, whose ability to pay is high, rather than a low tax simply because he consumes little?

The basic proposition of progressive consumption tax proponents is this: It is fairer to tax a person according to what he takes out of the economic pie, rather than according to what he contributes to it. A person's income often (not always) roughly reflects his production—his contribution to economic output. Hence, a tax on income is roughly a tax on a person's contribution to the economic pie. By contrast, a tax on consumption is a tax on the slice of the pie that a person withdraws for his own satisfaction.

When a person produces and earns income, a contribution is made to the pool of available goods and services. Production adds, rather than subtracts, from others' economic well-being. Income is a potential claim to goods, not the actual withdrawal of goods. But when a person actually withdraws resources for his own consumption, these resources are not available for others to consume; nor are the resources available for business firms to invest in plant, equipment, and technology, thereby raising

everyone's productivity and earnings in the future. Progressive consumption tax proponents argue that it is fairer to charge each person, through tax, according to what he subtracts from what is available to others, rather than what he adds to what is available.

Consider Carl and Susan. They have the same production and income, but Carl uses his entire income to withdraw goods for his own enjoyment, while Susan uses only a fraction of her income to withdraw consumption goods, leaving resources for others to consume and invest. Is it really fair to tax them equally? Both have the power to consume equally. But Susan leaves more for others than does Carl.

According to this view of fairness, Carl should pay more tax than Susan. But suppose Carl consumes twice as much as Susan. Does this mean he should pay exactly twice as much tax? Not at all. Advocates of a progressive consumption tax believe that Carl should pay more than twice the tax that Susan pays. But the basis of the tax should be consumption, not income.

While some consumption tax advocates rest their equity argument on a lifetime perspective, my argument accepts the annual criterion usually applied to the income tax. I contend that, each year, it is fairer to tax each person, using graduated rates, on his consumption that year, rather than on his income that year. The equity case for a personal consumption tax does not depend on adopting a lifetime perspective.

It is interesting to compare the principle of taxing according to withdrawal from the pie with the principle of taxing according to ability to pay. In most cases, the two principles yield a similar pattern of tax across households because high-consumption households generally possess high income, and hence high ability to pay. In some cases, however, the two principles yield very different taxes for particular households. It is here that the ability-to-pay principle deserves more careful scrutiny than it often receives.

Many analysts, and virtually all income tax advocates, take it for granted that ability to pay is the sole criterion by which to judge fairness. But, on reflection, the ability-to-pay principle contains an element of expediency: Tax a person more simply because the person is able to pay more. But it seems reasonable to contend that a principle of fairness ought to consider what each person adds to and subtracts from the economic pie. It ought to consider how a person's economic behavior affects others. From this perspective, it seems fairer to tax a person according to what he subtracts from, rather than what he adds to, the economic pie.

Progressive consumption tax advocates believe that fairness should take account of the consequences for others. True, a person may get satisfaction from saving as well as consuming. But saving benefits others by raising investment and hence future productivity. Consumption benefits the person who consumes the resources. Earlier I presented arguments for raising the U.S. savings rate. A higher savings rate will raise the real wage of all workers, including low-skilled workers; it will therefore reduce absolute poverty faster for low-skilled persons able and willing to work. A higher savings rate will preserve our future international standard-of-living ranking and will contribute to the "ascent of man" through technological progress. True, the household that saves is not motivated by any of these consequences. But, for a consumption tax advocate, these consequences are nevertheless relevant to fairness. Why should we tax S less than C? Both S and C are motivated by self-interest. But S's behavior leads to certain positive consequences for others while C's does not. So, yes, we deem it fair to tax S less than C.

The affluent often object that high income taxes inhibit their ability to save, thereby reducing national investment to the detriment of everyone. True enough. The progressive consumption tax puts each affluent household to the test. High-saving affluent households will indeed enjoy a tax cut, enhancing their abil-

ity to save more; in the extreme, the thrifty affluent will pay little tax. But low-saving affluent households will pay more tax.

Thus, a progressive consumption tax creates a new covenant with the affluent. It says to them: If you save, thereby raising investment, productivity, and the wage of the average worker, you will be rewarded with a lower tax. But, if you consume, subtracting resources from the economic pie for your own benefit, you will not be so rewarded. The aim is not to penalize consumption but to reward saving, which will lead to higher future output and consumption.

Income tax advocates worry about the concentration of wealth that might result from such a covenant with the affluent. Progressive consumption tax proponents plead guilty to the charge that their tax promotes wealth accumulation better than the income tax. The accumulation of wealth by households is matched by the accumulation of real capital (machinery, technology) that raises the productivity and real wage of the average worker. When persons accumulate, the corresponding real capital benefits others. When they stop accumulating and consume, they benefit themselves. The progressive consumption tax strikes this bargain: Accumulate, and your tax will be low; decumulate and consume, and your tax will be high. Your tax will depend on how your behavior affects others.

I would argue that this new covenant with the affluent implies that gift and estate taxes should be terminated, with the revenue replaced by increasing the consumption tax rates that apply to the affluent. The aim would be to increase the incentive of the affluent to abstain from high consumption, leaving more resources for capital accumulation that benefits the average household in the future.

From this perspective, this future benefit to the average household is more important than any harm that may result from some additional concentration of wealth in the hands of thrifty affluent households. Concern about vague political consequences of such concentration is a poor reason to use an income tax to reduce everyone's accumulation of wealth, thereby harming everyone's future standard of living. The reform of rules governing campaign financing and lobbying is a more direct approach to the political problem that avoids harmful economic side effects.

Don't many of the affluent take pleasure directly from earning and accumulating, not simply from consuming? Undoubtedly they do. But progressive consumption tax proponents are interested in the impact on others. You may enjoy earning and accumulating for its own sake, but this is not sufficient reason to tax you heavily. Only when you take a huge slice of the economic pie for your own enjoyment will you be heavily taxed not because there is anything wrong with enjoying the slice, but because it leaves less for others.

The progressive personal consumption tax differs fundamentally from a labor income (wage) tax. To see this, consider the lazy heir who inherits a large fortune, uses it to finance a high level of consumption, and never works a day in his life. Under a labor income tax, the lazy heir would owe zero tax. But the lazy heir would owe more tax under a progressive personal consumption tax than under an income tax. As he sells his stocks and bonds to finance consumption, his cash inflow would record the sale of assets. Because there is no corresponding saving deduction, his taxable consumption would correspond to his asset sales. Most citizens believe that people who enjoy high consumption should pay high tax. A graduated personal consumption tax assures this. A wage tax does not. Thus, when it comes to fairness, a progressive personal consumption tax differs dramatically from a wage tax.

In conclusion, let me restate the fundamental fairness principle of the progressive personal consumption tax: Using progressive rates, tax each person not according to his ability to

Table 2

A Personal Consumption Tax Return

Cash Inflows

1.	Wages and salaries	\$60,000
2.	Interest, dividends, cash withdrawals from business	\$3,000
3.	Withdrawals from savings accounts or investment funds	\$2,000
4.	Sale of stocks and bonds	\$2,000
5.	Loans (excluding consumer-durable loans)	\$2,000
6.	Cash gifts and bequests received	\$1,000
7.	Pension, Social Security, and insurance cash benefits	\$0
8.	Total (add lines 1, 2, 3, 4, 5, 6, 7)	\$70,000
Nor	n-Consumption Cash Outflows	
9.	Deposits into savings accounts or investment funds	\$9,000
10.	Purchase of stocks and bonds	\$7,000
11.	Loan repayments (excluding consumer-durable loans)	\$1,000
12.	Cash charitable contributions and gifts given	\$1,000
13.	Higher-education tuition (investment component)	\$2,000
14.	Total (add lines 9, 10, 11, 12, 13)	\$20,000
15.	Consumption (subtract line 14 from line 8)	\$50,000
Dec	luctions	
16.	Personal exemptions	\$10,000
17.	Family allowance	\$7,000
18.	Old-wealth deduction	\$3,000
19.	Total (add lines 16, 17, 18)	\$20,000
20.	Taxable Consumption (subtract line 19 from line 15)	\$30,000
21.	Tax	\$10,000
22.	Payroll tax credit	\$4,000
23.	Net Tax (subtract line 22 from line 21)	\$6,000

pay or according to his productive contribution, but according to what he withdraws for his own benefit and enjoyment, thereby leaving less for others to consume or businesses to invest.

Design

The tentative details of the design of the USA household tax have been set out in the 1995 bill and in an important article by

Christian and Schutzer (1995). The bill proposes essentially a personal consumption tax but differs in certain details. Because some design details continue to evolve in response to feedback, I will give an exposition of the personal consumption tax. Design details are discussed at greater length in Seidman (1997).

A personal consumption tax return must instruct the household to compute its consumption this year. The strategy is indirect: Sum this year's cash inflows, and then subtract this year's non-consumption cash outflows; what remains is consumption. Household consumption is normally financed by cash—currency or check—perhaps with a delay after the use of a credit card. To compute its consumption, the household must add all cash inflows, then subtract all non-consumption cash outflows. This is illustrated by the personal tax return in Table 2.

A key point is that what matters is not whether an item is "income" but whether it is a cash inflow that must be included in order to yield an accurate computation of consumption. Lines 1 and 2 are the same as under an income tax, but line 3 is not: Withdrawals from a savings account or an investment fund are cash inflows, not income. On line 4 revenue from the sale of stocks and bonds is cash inflow, not income (which would require subtraction of the cost of purchasing these assets). On line 5, a loan is cash inflow, not income. I therefore recommend that the term "cash inflow" replace "income" on the household tax return and in any description of the USA tax. The terminology should convey the fact that the USA household tax is a cashflow consumption tax, not an income tax.

How should expenditure on an expensive consumer durable be treated? The person who buys a car for \$25,000 does not consume \$25,000 in the year of purchase. Ideally, tax should be spread over time as consumption occurs. This is easily done if the household borrows to finance the purchase. To achieve tax spreading, expenditure on the durable would be non-deduct-

ible, but the taxpayer would exclude borrowing for the durable from cash inflows.

In turn, the loan repayments (principal plus interest) would be non-deductible, so the household would be implicitly taxed on each repayment. For example, suppose the car is purchased with the help of a \$20,000 auto loan. If the repayment period is five years and the interest rate is 7 percent, then the household would exclude \$20,000 from cash inflows in the year of purchase when the loan is obtained, but the annual loan repayment (principal plus interest) of \$4,559 would be non-deductible and hence implicitly taxed each year.

This treatment can be applied to owner-occupied housing. If a household buys a home for \$165,000, the expenditure would be non-deductible; but if it obtains a loan (mortgage) of \$150,000 with a repayment period of thirty years and an interest rate of 7 percent, then the household would exclude \$150,000 in the year of purchase when the mortgage is obtained, but the annual loan repayment (principal plus interest) of \$11,297 would be nondeductible and hence implicitly taxed. Expenses for maintenance, repair, and improvement would all be non-deductible because these costs would be reflected in the rent if the owner rented the house out. For the same reason, property taxes would be non-deductible. Note that when a major home renovation is financed by a loan, the tax would be spread over time because the loan would be excluded and repayments would be non-deductible.

How should gifts and bequests be treated? Under a personal consumption tax (in contrast to a consumption/gift/bequest tax), a household is taxed according to the resources it actually withdraws from the economic pie for its own consumption. A donor does not consume resources when he gives a cash gift, bequest, or charitable contribution. Hence, the gift, bequest, or contribution would be tax deductible—it is a non-consumption cash outflow. If the recipient household saves it, the household

would not be taxed. When and if the recipient consumes it, it would be taxed.

If actual consumption is accepted as the criterion, then estate and gift taxes should be terminated because these transfers of wealth do not entail any actual consumption. The revenue lost should be replaced by raising the consumption tax rates that apply to the affluent. From this perspective, a donation should not be taxed under any tax because the donation is not actual consumption. This treatment of gifts and bequests gives each person an incentive to preserve the wealth that he has accumulated rather than consume it. It should also be emphasized that the incentive to work and save is stronger if tax can be permanently escaped as long as one never consumes the earnings.

State and local government bond interest must be included on line 2. It is a cash inflow that must be added to other cash inflows to compute the household's consumption accurately. Its omission from the computation would cause a serious error in computed consumption for some affluent households. If federal assistance is warranted, the federal government can reimburse state and local governments for a percentage of their interest costs.

How should tuition for higher and vocational education be handled? Because investment in human capital (education and training) raises a nation's economic productivity, it makes little sense to allow a deduction for investment in physical capital but no deduction for investment in human capital. College tuition is part investment, part consumption. Some portion of tuition expense—reflecting the investment component—should be made deductible. Students in vocational, technical, and graduate schools should be permitted to deduct a higher percentage.

To compute the household's consumption accurately, cash benefits must be fully included in cash inflows on line 7: pension, social security, unemployment insurance, and life insurance. If these benefits are saved, there is a corresponding

non-consumption cash outflow. With a progressive tax schedule, including these benefits will result in little or no tax for lowconsumption recipients.

Both employer and employee purchases of life insurance are treated like saving: The purchase is deductible, but benefits from the life insurance are included in the recipient's cash inflows. If the recipient initially saves the benefits, there would be an equal deduction so the recipient initially pays no tax. The recipient would pay tax only as he uses the benefits for consumption. Note that while averaging is necessary for a large lump-sum payment under an income tax, it is unnecessary under a consumption tax.

By contrast, both employer and employee purchases of health insurance are not deductible, so these expenditures are treated as consumption. In turn, payments by health insurers—private companies or government—to medical providers on behalf of the household are excluded. This treatment is practical and equitable. It avoids taxing as consumption a large hospital or doctor bill that is paid by the insurer.

While households generally finance most or all of their consumption, business firms finance some consumption for some employees or clients. Two approaches are possible: (1) Attribute the expenditure to a particular individual for inclusion on the household tax return, so the individual is taxed on the expenditure; or (2) deny the firm a deduction for the expenditure on the business tax return, so the firm pays tax on the expenditure.

What should be done about "old wealth" acquired before tax conversion? Conversion from the income tax to any consumption tax creates a double-taxation problem. People who accumulate wealth after paying income tax look forward to consuming that wealth without paying a second tax. Suddenly conversion occurs with the laudable objective of promoting saving. But people are often right to object: "It's unfair to tax me when I consume

my 'old' (previously acquired) wealth. You are taxing me twice."

Fortunately, the problem is not as bad as it seems. An important share of each household's old wealth, such as pensions, often has not been taxed even once yet, and benefits would have been taxed under the income tax. Then consider people caught at conversion with a set of consumer durables. If the durables were financed largely by loans, then this source of financing was not taxed under the income tax: Loans are not taxable income. So taxing the loan repayments by making them non-deductible under the consumption tax would tax this consumption once, not twice. If the durables were bought without borrowing, the source of financing was generally taxed under the income tax. But the flow of consumption services will remain tax-free—it is impractical to tax these flows for most durables under either an income or consumption tax. So these durables will also escape double taxation. Thus, no matter how old durable wealth was financed, it will generally escape double taxation.

Next, consider people who bought corporate stock years ago at prices that seem low by today's standards. True, the stock was generally bought after paying income tax. But as the stock appreciated in value each year, tax on the accrued capital gain was deferred. So when stock bought a decade ago for \$2,000 is sold today for \$10,000, only \$2,000 of it has been previously taxed, and \$8,000 would be taxed under the income tax. So \$8,000 of the \$10,000 that must be entered on line 4 would have been taxed under the income tax.

Finally, it should be recognized that an important fraction of wealth, especially wealth held by the very affluent, will not be consumed, but will be given away as gifts or bequests. Under a consumption tax (in contrast to a consumption/gift/bequest tax), the donor household will not be taxed again on this wealth. So gift and bequest wealth is already protected against double taxation.

Thus, the double-taxation problem is not as bad as it seems.

Nevertheless, the problem still warrants treatment for wealth that has been accumulated from after-tax income, would not be taxed again under the income tax, but will in fact be consumed and hence taxed under the consumption tax unless there is an old-wealth deduction.

Senator Domenici (1994) recommends that each household perform a one-time computation of its old wealth in the year of tax conversion. The household would then deduct a portion of its old wealth over several years. This amortization method would provide some protection. In my view, Domenici's method is the best solution to the old-wealth problem, provided that it is limited to moderate holdings. The complexity occurs just once: the computation of old wealth in the year of enactment. Thereafter, the household is taxed on its consumption (computed by cash flows) except that it can deduct a percentage of its old wealth (computed in the year of enactment) until it uses up its deduction. For example, the household's cumulative deductible old wealth might be 80 percent of its first \$50,000, 40 percent of its next \$50,000, and 0 percent thereafter. This amount would be deducted evenly over five years.

I recommend a moderate ceiling for three reasons. First, an important share of wealth above such a ceiling will not be consumed, but will be given away as gifts and bequests, so it will not be taxed under the personal consumption tax; hence it is already protected, and a deduction would offer unjustified double protection. Second, large wealth holdings often include assets that are difficult to value. Third, it is important to limit the revenue loss from the old-wealth deduction.

It is sometimes mistakenly thought that only the personal consumption tax has a double taxation problem. On the contrary, all consumption taxes do. Advocates of the sales tax, the VAT, and the flat tax generally ignore the problem. Yet imagine the person who plans to consume his old wealth suddenly stand-

ing at the cash register facing prices that are 20 percent higher because of a sales tax, VAT, or flat tax. Obviously, it does not matter whether the second tax is levied at the cash register or on April 15—it is still double taxation. Yet only the personal consumption tax is equipped to mitigate it.

Another transitional problem concerns hoarding cash just before tax conversion. Suppose a household sells financial assets or withdraws cash from savings accounts or investment funds and hoards the cash (in the home, in buried safety deposit boxes, in foreign or domestic banks that will not report cash withdrawals to the IRS, and so on). Then, after tax conversion it can finance consumption without paying tax by using its hoarded cash.

To contain this problem, in the year of conversion each household would be required to list cash held on the prior December 31 and to include this amount in cash inflows on its first-year tax return. I have no illusion that experienced evaders would comply. However, it seems likely that households too honest or risk-averse to evade under the income tax would generally be deterred by this requirement from attempting significant evasion through cash hoarding.

Because no one can be sure how much people will reduce their consumption following tax conversion, it is prudent to phase in the population over a half-decade to avoid a temporary recession. The best method would be cross-section phasing. Each year a representative mix of incomes, ages, geographic location and so on would be converted. Households would be classified using the income tax returns filed just before conversion. The particular households chosen to convert each year would be selected by a random drawing. Cross-section phasing has several advantages. First, no one can object that a particular income or age group is being favored or penalized. Second, converting a crosssection of the population each year would limit the harm to any particular industry.

Note

1. To see this, suppose in year 0 that output is 100, consumption 80, and investment 20. If consumption grows 1.5 percent per year for 5 years, in year 5 it will be $80 \times (1.015)^5 = 86$. If investment grows 6.2 percent per year for five years, in year 5 it will be $20 \times (1.062)^5 = 27$. Output in year 5 will be 86 + 27 = 113, so output will have grown approximately 2.5 percent per year because $100 \times (1.025)^5 = 113$. But now consumption will be 76 percent of output (86/113 = 0.76) and investment will be 24 percent of output (27/113 = 0.24). From then on, we envision the shares (76 percent, 24 percent) remaining constant so that output, consumption, and investment all grow at the same rate—somewhat higher than 2.5 percent per year for many years because of the greater investment share (24 percent versus 20 percent).

For Further Reading

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