# 2

## Putting the Flat Tax into Action

Robert E. Hall and Alvin Rabushka

ax forms can fit on postcards. A cleanly designed tax system takes only a few elementary calculations, in contrast to the hopeless complexity of today's income taxes. We have developed a complete plan for a whole new tax system. Our system would put a low tax rate on a comprehensive definition of income. Because the tax would be applied to a wider definition of income, the tax rate would be an astonishingly low 19 percent but would raise the same revenue as does the current tax system. The proposed tax is fair to families—the poor would pay no tax at all. The tax would also be progressive: the fraction of income that a family would pay in taxes would rise with income. The proposed system is simple and easy to understand. And the tax would operate on the consumption-tax principle: families would be taxed on what they take out of the economy, not on what they put into it.

Our system rests on the basic administrative principle that income should be taxed exactly once, as close as possible to its source. Today's tax system violates this principle in all kinds of ways. Some kinds of income—such as fringe benefits—are never taxed at all. Other kinds, such as dividends and capital gains, are taxed twice. And interest income, which is supposed to be taxed once, escapes taxation completely in all too many cases, where taxpayers arrange to receive interest beyond the reach of the Internal Revenue Service.

Our plan combines the merits of an income tax and a consumption tax. The tax on wages and salaries is a pro-

HALL AND RABUSHKA

gressive tax because—thanks to a generous initial family allowance—the proportion of income paid in taxes rises with income, even though the tax rate is flat. Up to an exemption level—\$25,500 for a family of four—wages are untaxed. All wages above the exemption level are taxed at the same rate of 19 percent. Uniformity of the tax rate above the exemption level is a basic concept of the flat tax. Its logic is much more profound than just the simplicity of calculation with a single tax rate. Whenever different forms of consumption or income are taxed at different rates or different taxpayers face different rates, the public can take advantage of the differentials.

#### Progressivity, Efficiency, and Simplicity

Limiting the burden of taxes on the poor is a central principle of tax reform. Some ideas for tax simplification and reform flout this principle. Neither a federal sales tax nor a value-added tax would be progressive. Instead, all citizens, rich and poor alike, would pay essentially the same fraction of their spending in taxes. Although sales and value-added taxes generally are a form of consumption tax, we reject them for their lack of progressivity. The current federal tax system avoids taxing the poor, and we think it should stay that way.

Exempting the poor from taxes does not require graduated tax rates rising to high levels for upper-income taxpayers. A flat rate, applied to all income above a generous personal allowance, would provide progressivity without creating important differences in tax rates. Graduated taxes automatically create differences in tax rates among taxpayers, with all the attendant opportunities for leakage. Because high-income taxpayers have the biggest incentive and the best opportunity to use special tricks to exploit tax-rate differentials, applying the same tax rate to these taxpayers for all their income in all years is the most important goal of flat-rate taxation.

Our proposal is based squarely on the principle of consumption taxation. To make consumption the base

upon which the tax is calculated, we use the tested principle of taxing value added with a deduction for investment spending and family allowances to ensure progressivity. The effect of our proposed tax is the same as a tax on retail sales of consumption goods but, with personal deductions added, avoids some serious administrative problems that plague sales taxes. By contrast, the tax system in the United States today taxes income—the sum of consumption and investment—with an incredible hodgepodge of provisions to encourage some types of investment and some types of saving. The total effect of these incentives is spotty. There are excessive incentives for some saving and investment channels and inadequate incentives for others. In our system, there would be a single, coherent approach based on the value-added principle to create a clean consumption tax.1

We believe that the simplicity of our system is a central feature. Complex tax forms and tax laws do more harm that just deforesting America. Complicated taxes require expensive advisers for taxpayers and equally expensive reviews and audits by the government. A complex tax invites the taxpayer to search for a special feature to exploit to the disadvantage of the rest of us. And complex taxes diminish confidence in government, inviting a breakdown in cooperation with the tax system and the spread of outright evasion.

#### An Integrated Flat Tax

Our flat tax would apply to both businesses and individuals. Although our system would have two separate tax forms—one for business income and the other for wages and salaries—it would be an integrated system. When we speak of its virtues, such as its equal tax rate for all types of income, we mean the system, not one of its two parts. As we will explain, the business tax would not just be a replacement for the existing corporate income tax. The business tax would cover all businesses, not just corporations.

And it would cover interest income, including that which is currently taxed as personal income.

In our system, all income would be classified as either business income or wages (including salaries and retirement benefits). The system would be airtight. Taxes on both types of income would be equal. The wage tax would have features to make the entire system progressive. Both taxes would have postcard forms. The low tax rate of 19 percent would be enough to match the revenue of the federal tax system as it existed in 1993.

Here is the logic of our system, stripped to basics: We want to tax consumption. Families do one of two things with income—spend it or invest it. We can measure consumption as income minus investment. A really simple tax would just have each firm pay tax on the total amount of income generated by the firm less that firm's investment in plant and equipment, similar to the value-added tax. But the value-added tax is unfair because it is not progressive. That is why we break the tax in two. The firm would pay tax on all the income generated at the firm except the income paid to its workers, purchases of inputs, and purchases of plant and equipment. The workers themselves would pay tax on what they earn, and the tax they pay would be progressive.

To measure the total amount of income generated at a business, we take the total receipts of the firm over the year and subtract the payments the firm has made to its workers and suppliers. This approach guarantees a comprehensive tax base. Value-added taxes in Europe work just this way. The base for the business tax is the following:

total revenue from sales of goods and services less
purchases of inputs from other firms less
wages, salaries, and pensions paid to workers less
purchases of plant and equipment

TABLE 2–1
FLAT-TAX REVENUES COMPARED WITH CURRENT REVENUES
(billions of dollars)

Lin	ne Income or Revenue	Dollars	
1	Gross domestic product	6,374	
2	Indirect business tax	431	
3	Income included in GDP but not in tax base	217	
4	Wages, salaries, and pensions	3,100	
5	Investment	723	
6	Business-tax base (line 1 minus lines 2 through 5)	1,903	
7	Business-tax revenue (19 percent of line 6)	362	
8	Family allowances	1,705	
9	Wage-tax base (line 4 less line 8)	1,395	
10	Wage-tax revenue (19 percent of line 9)	265	
11	Total flat-tax revenue (line 7 plus line 10)	627	
12	Actual personal income tax	510	
13	Actual corporate income tax	118	
14	Total actual revenue (line 12 plus line 13)	627	

SOURCE: U.S. National Income and Product Accounts, 1993, and authors' calculations.

The other piece is the wage tax. Each family would pay 19 percent of its wages, salary, and pension income over a family allowance. The allowance makes the system progressive. The base for the compensation tax would be total wages, salaries, and retirement benefits less the total amount of family allowances.

Table 2–1 shows how we calculate potential flat-tax revenue from the U.S. National Income and Product Accounts for 1993. The first line shows gross domestic product (GDP), the most comprehensive measure of income throughout the economy. The next two lines are items that are included in GDP but would not be taxed under the flat tax, such as sales and excise taxes. Line 3, income included in GDP but not in the tax base, is mostly the value of the

services of houses owned and lived in by families; this income does not go through the market. Wages, salaries, and pensions, line 4, would be reported by the firm's workers on their wage-tax forms and would be deducted by businesses. Investment, line 5, is the amount spent by businesses on purchases of new plant and equipment (each business could also deduct its purchases of used plant and equipment, but these would be included in the taxable income of the selling business and would net out in the aggregate). Line 6 shows the potential taxable income under a flat tax of all businesses after they have deducted their wages and investment. The potential revenue from the business tax, line 7, is 19 percent of the tax base on line 6. Line 8 shows the amount of family allowances that would be deducted. The wage-tax base on line 9 shows the amount of wages, salaries, and pensions left after deducting all family allowances from the amount on line 4. The potential wage-tax revenue on line 10 is 19 percent of the base. Total flat-tax revenue on line 11 would be \$627 billion. Lines 12 and 13 show the actual revenue from the personal and corporate income tax. The total actual revenue on line 14 is also \$627 billion. The potential flat-tax revenue and the actual revenue are the same, by design. Our proposal is to reproduce the revenue of the actual income tax system, not to raise or to lower it.

These computations show that in 1993 the revenue from the corporate income tax, with a tax rate of 34 percent, was \$118 billion. The revenue from our business tax at a rate of only 19 percent would have been \$362 billion, just over three times as much, even though the tax rate is not much over half the current corporate rate. There are three main reasons that the flat business tax would yield more revenue than the existing corporate tax does. First, slightly more than half of business income is earned by noncorporate businesses—professional partnerships, proprietorships, and the like. Second, the business tax would put a tax on fringe benefits, which escape taxation in the current system, by not allowing them to be deducted. Third, by refus-

ing to allow interest expense as a deduction, the business tax imposes tax on interest at its source in business, rather than at its destination.

The other side of the coin, of course, is that our wage tax would have yielded less revenue than the current personal income tax does—\$265 billion in 1993 as against \$510 billion. We are not proposing a massive shift in taxes from wages to capital income. Our wage tax would apply just to wages, salaries, and private pensions, whereas today's personal income tax includes unincorporated business income, dividends, interest, rent, and many other kinds of income that we would tax as part of business income. The switch to the more reliable principle of taxing business income at the source, rather than hoping to catch the income at the destination, is the main reason that the business tax would yield so much more revenue than the current corporate tax does.

The Individual Wage Tax. The individual wage tax would have a single purpose: to tax the large fraction of total income that employers pay as cash to their workers. It would not be a tax system by itself but would be one of the two major parts of the complete system. The base of the proposed tax is defined narrowly and precisely as actual payments of wages, salaries, and pensions. Pension contributions (as opposed to benefits) and other fringe benefits paid by employers would not be counted as part of wages. In other words, the tax on pension income would be paid when the retired worker actually receives the pension, not when the employer sets aside the money to pay the future pension. Pension contributions would not be taxed if the employer pays into a completely separate pension fund, if the worker makes a voluntary contribution to a 401(k) program, or if the worker contributes to a Keogh or other individual retirement fund. The contributions would not be taxed until they were distributed at retirement.

The tax form for our wage tax is self-explanatory. To make the tax system progressive, only earnings over a per-

sonal or family allowance would be taxed. The allowance would be \$25,500 for a family of four in 1996 but would rise along with the cost of living in later years. All the tax-payer would do is report total wages, salaries, and pensions at the top of the form, compute the family allowance based on marital status and number of dependents, subtract the allowance, multiply by 19 percent to compute the tax, take account of withholding, and pay the difference or apply for a refund. For about 80 percent of the population, filling out this postcard once a year would be the only effort needed to satisfy the Internal Revenue Service. What a change from the many pages of schedules the typical frustrated taxpayer fills out today!

For the 80 percent of taxpayers who do not run businesses, the individual wage tax would be the only tax to worry about. Many features of current taxes would disappear, including charitable deductions, mortgage interest deductions, capital gains taxes, dividend taxes, and interest taxes. We will discuss these in detail later.

Anyone who is self-employed or pays expenses directly in connection with making a living would need to file the business tax to get the proper deduction for expenses. Fortunately, the business-tax form would be even simpler than the wage-tax form (see figure 2–1).

The Business Tax. It would not be the purpose of the business tax to tax businesses. Fundamentally, people pay taxes, not businesses. The idea of the business tax would be to collect the tax that the owners of a business owe on the income produced by the business. Collecting business income tax at the source of the income would avoid one of the biggest causes of leakage in the tax system today: interest can pass through many layers where it is invariably deducted when it is paid out but not so frequently reported as income.

Airtight taxation of individual business income at source is possible because we already know the tax rate of

FIGURE 2-1

Fo	rm 1 Individual Wage Tax	1996	
ret	ur first name and initial (if joint Last urn, also give spouse's name name d initial)	Your social security number	
	me address (number and street including artment number or rural route)	Spouse's social security number	
	y, town, or post office, state, d ZIP code	Your occupation	
		Spouse's occupation	
1 2 3 4 5 6 7 8	Wages and salary Pension and retirement benefits Total compensation (line 1 plus line 2) Personal allowance (a) \$16,500 for married filing jointly (b) \$9,500 for single (c) \$14,000 for single head of household Number of dependents, not including spouse Personal allowances for dependents (line 5 multiplied by \$4,500) Total personal allowances (line 4 plus line 6) Taxable compensation (line 3 less line 7, if positive; otherwise zero)	1 2 3 4a 4b 4c 5 6 7 8	
9 10 11 12	Tax (19% of line 8) Tax withheld by employer Tax due (line 9 less line 10, if positive) Refund due (line 10 less line 9, if positive)	9 10 11 12	

all the owners of the business: it is the common flat rate paid by all taxpayers. If the tax system has graduated rates, taxation at the source would become a problem. If each owner were to be taxed at that owner's rate, the business would have to find out the tax rate applicable to each owner and apply that rate to the income produced in the business for that owner. But this is only the beginning of the problem. The IRS would have to audit a business and its owners together to see that the owners were reporting the correct tax rates to the business. Further, suppose one of the owners made a mistake and was later discovered to be in a higher tax bracket. Then the business would have to refile its tax form to collect the right tax. Obviously, this system would not work. Business taxes have to be collected at the destination, from the owners, if graduated rates are to be applied. Source taxation is practical only when a single rate is applied to all owners. Because source taxation is so much more reliable and inexpensive than the present method, there is a powerful practical argument for using a single flat rate for all business income.

The business tax would be a giant, comprehensive withholding tax on all types of income other than wages, salaries, and pensions. It would be carefully designed to tax every bit of income outside of wages but to tax it only once. The business tax would not have deductions for interest payments, dividends, or any other type of payment to the owners of the business. As a result, all income that people would receive from business activity would already have been taxed. Because the tax would already have been paid, the tax system would not need to consider what would happen to interest, dividends, or capital gains after these types of income leave the firm. The resulting simplification and improvement in the tax system would be enormous. Today, the IRS receives over a billion Form 1099s, which keep track of interest and dividends, and the agency must make an overwhelming effort to match these forms to the 1040s filed by the recipients. The only reason for a Form 1099 is to track income as it makes its way from the business where it originates to the ultimate recipient. Not a single Form 1099 would be needed under a flat tax with business income taxed at the source.

The way that we have chosen to set up the business

#### FIGURE 2-2

Fo	rm 2 Business Tax			1996
Bu	siness name	Emp		Identification umber
Street address		County		
Cit	City, state, and ZIP code		Principal product	
3 4 5 6 7 8 9 10	Gross revenue from sales Allowable costs (a) Purchases of goods, services, and materials (b) Wages, salaries, and retirement ben (c) Purchases of capital equipment, structures, and land Total allowable costs (sum of lines 2(a), 2 and 2(c)) Taxable income (line 1 less line 3) Tax (19% of line 4) Carry-forward from 1994 Interest on carry-forward (6 % of line 6) Carry-forward into 1995 (line 6 plus line Tax due(line 5 less line 8, if positive) Carry-forward to 1996 (line 8 less line 8 if positive)	2(b), · 7)	1 2a 2b 2c 3 4 5 6 7 8 9	

tax is not arbitrary. On the contrary, it is dictated by the principles we set forth at the beginning of this discussion. The tax would be assessed on all the income originating in a business but not on any income that originates in other businesses, nor would it tax the wages, salaries, and pensions paid to employees. The types of income taxed by the business tax would include:

- profits from the use of plant and equipment
- profits from ideas embodied in copyrights, patents,

trade secrets, and the like

- profits from past organization-building, marketing, and advertising efforts
- earnings of key executives and others who are owners as well as employees, and who are paid less than they contribute to the business (so that reduced compensation would not be used to avoid taxation)
- earnings of doctors, lawyers, and other professionals who have businesses organized as proprietorships or partnerships
  - rent earned from apartments and other real estate
  - fringe benefits provided to workers

All a business's income would derive from the sale of its products and services. On the top line of the business tax form (figure 2-2) would appear the gross sales of the business-its proceeds from the sale of all its products. But some of the proceeds would come from the resale of inputs and parts the firm purchased; the tax would already have been paid on these items because the seller also would have to pay the business tax. Thus, the firm could deduct the cost of all the goods, materials, and services it purchased for the purpose of making the product it sells. In addition, it could deduct its wages, salaries, and pensions, for, under our wage tax, the taxes on these would be paid by the workers receiving them. Finally, the business could deduct all its outlays for plant, equipment, and land. Later we will explain why this investment incentive would be just the right one.

Everything left from this calculation is the income originating in the firm and would be taxed at the flat rate of 19 percent. The prospective revenue from the business tax in 1993 would have been the \$362 billion we computed earlier. Many deductions allowed to businesses under current laws would be eliminated in our plan, including interest payments and fringe benefits. But our exclusion of these deductions is not an arbitrary move to increase the tax

base. In all cases, the elimination of deductions, when combined with the other features of our system, moves toward the goal of taxing all income once at a common, low rate to achieve a broad consumption tax.

Eliminating the deduction for interest paid by businesses is a central part of our general plan to tax business income at the source. It makes sense because we propose not to tax interest received by individuals. The tax that the government now hopes (sometimes in vain) that individuals will pay will assuredly be paid by the business itself.

We sweep away the whole complicated apparatus of depreciation deductions, but we replace it with something more favorable for capital formation, an immediate 100 percent first-year tax write-off of all investment spending. Sometimes this approach is called *expensing* of investment; it is standard in the value-added approach to consumption taxation. In other words, we do not deny depreciation deductions; we enhance them.

Fringe benefits are outside the current tax system entirely, which makes no sense. The cost of these benefits is deductible by businesses, but workers are not taxed on their value. Consequently, fringe benefits have a big advantage over cash wages. As taxation has become heavier and heavier, fringe benefits have become more and more important in the total package offered by employers to workers. Such benefits were only 1.2 percent of total compensation in 1929, when income taxes were unimportant, but reached almost 18 percent in 1993. The explosion of benefits is strictly an artifact of taxation, and benefits are an economically inefficient way to pay workers. If the tax system were neutral, with equal taxes on fringes and cash, workers would rather take their income in cash and make their own decisions about health and life insurance, parking, exercise facilities, and all the other things they now get from their employers without much choice. Further, failing to tax benefits means that taxes on other types of income are higher. Bringing all types of income under

the tax system is essential for lower rates.

Under our system, each business would file a simple form. Even the largest business—the General Motors Corporation in 1993, with \$138 billion in sales—would fill out our simple postcard form. Every line on the form is a welldefined number obtained directly from the business's accounting records. Line 1, gross revenue from sales, is the actual number of dollars received from the sales of all the products and services sold by the business, plus the proceeds from the sale of plant, equipment, and land. Line 2a is the actual amount paid for all the inputs bought from other businesses necessary for the operation of the business (that is, not passed on to its workers or owners). The firm could report any purchase actually needed for the business's operations and not part of the compensation of workers or owners. Line 2b is the actual cash put in the hands of workers and former workers. All the dollars deducted on this line will have to be reported by the workers on their Form 1 wage-tax returns. Line 2c reports purchases of new and used capital equipment, buildings, and land. Note that the firm would not have to agonize over whether a computer modem is a capital investment or a current input; both are deductible, and the IRS would not care on which line it would appear.

The taxable income computed on line 4 bears little resemblance to anyone's notion of profit. The business tax would not be a profit tax. When a firm is having an outstanding year in sales and profits but is building new factories to handle rapid growth, it might well have a low or even negative taxable income. Later, when expansion slows but sales are at a high level, the income generated at the firm would be taxed at 19 percent.

Because the business tax would treat investment in plant, equipment, and land as an expense, companies in the start-up period would have negative taxable income. But the government would not write a check for the negative tax on the negative income. When the government has a policy of writing checks, clever people abuse the opportunity. In-

stead, the negative tax would be carried forward to future years, when the business should have positive taxable income. There would be no limit to the number of years of carry forward. Moreover, balances carried forward would earn the market rate of interest (6 percent in 1995). Lines 6 through 10 show the mechanics of the carry-forward process.

#### **Investment Incentives**

The high rates of the current tax system significantly impede capital formation. On this point almost all experts agree. The government's solution to the problem has been to add one special investment or saving incentive on top of another, creating a complex and unworkable maze of regulations and tax forms. Existing incentives are appallingly uneven. Capital projects taking full advantage of depreciation deductions and the deductibility of interest paid to organizations exempt from income tax may actually receive subsidies from the government, rather than being taxed. But equity-financed projects are taxed heavily. Investment incentives, together with the deductibility of interest, severely distort the flow of capital into projects eligible for debt finance.

Our idea is to start over, throwing away all the present incentives and replacing them with a simple, uniform principle and treating the total amount of investment as an expense in the year it is made. The entire incentive for capital formation would be on the investment side, instead of the badly fitting split in the current tax system between investment incentives and saving incentives. The first virtue of this reform is simplicity. Businesses and government would not need to quarrel, as they do now, over what is an investment and what is a current expense. The distinction would not matter for the tax. Complicated depreciation calculations, carrying over from one year to the next and driving the small business owner to distraction, would vanish from the tax form. The even more complicated provisions for recapturing depreciation when a piece of

equipment or a building is sold would vanish as well, to everyone's relief.

Expensing of investment has a much deeper rationale than simplicity. Every act of investment in the economy ultimately traces back to an act of saving. A tax on income with an exemption for saving is in effect a tax on consumption, for consumption is the difference between income and saving. Consumption is what people take out of the economy; income is what people contribute. A consumption tax is the exact embodiment of the principle that people should be taxed on what they take out, not on what they put in. The flat tax, with expensing of investment, is precisely a consumption tax.

Expensing investment would eliminate the double taxation of saving; this would be another way to express the most economically significant feature of expensing. Under the current income tax, people pay tax once when they earn and save and again when the savings earn a return. With expensing, the first tax would be abolished. For individuals, the return to saving would be, in effect, deducted in computing the tax. Later, this return to saving would be taxed through the business tax. Although economists have dreamed up a number of other ways to eliminate double taxation of saving (involving complicated record keeping and reporting by individuals), the technique exploited in our flat tax is by far the most straightforward.

The easiest case for showing that expensing of investment makes our proposal a consumption tax arises when someone invests directly in a personally owned business. Suppose a taxpayer receives \$1,000 in earnings and turns around and buys a piece of business equipment for \$1,000. There would be a tax of \$190 on the earnings but also a deduction worth \$190 in reduced taxes for the equipment purchase. On net, there would be no tax. The taxpayer has not consumed any of the original \$1,000 either. Later, the taxpayer would receive business income representing the earnings of the machine. This income would be taxed at 19 percent. If the taxpayer chooses to consume rather

than invest again, there would be a 19 percent tax on the consumption. So the total effect would be a 19 percent consumption tax.

Most people do not invest directly by purchasing machines themselves. The U.S. economy has wonderfully developed financial markets for channeling savings from individual savers, on the one hand, to businesses with good investment opportunities, on the other hand. Individuals invest in firms by purchasing shares or bonds, and then the firms purchase plant and equipment. The tax system we propose taxes the consumption of individuals in this environment as well. Suppose the same taxpayer pays the \$190 tax on the same \$1,000 and puts the remaining \$810 into the stock market. For simplicity, suppose that the share pays out to its owner all the aftertax earnings on equipment costing \$1,000. That assumption makes sense, because the firm could buy \$1,000 worth of equipment with the \$810 from our taxpayer plus the tax write-off worth \$190 that would come with the equipment purchase. Our taxpayer gets the advantage of the investment write-off even though there is no deduction for the purchase of the share. The market passes through the incentive from the firm to the individual investor.

Another possibility for the taxpayer is to buy a bond for \$810. Again, the firm issuing the bond can buy a \$1,000 machine with the \$810, after taking advantage of the tax deduction. To compete with the returns available in the stock market, however, the bond must pay approximately the same returns as a stock selling for the same price does, which in turn is equal to the aftertax earnings of the machine. It would not matter then how the taxpayer invests the \$810. In all cases, there is effectively no tax for saved income; the tax is payable only when the income is consumed.

In our system, any investment, in effect, would have the same economic advantage that a 401 (K), IRA, or Keogh account has in the current tax system. And we achieve this desirable goal by *reducing* the amount of record keeping and reporting. Today, taxpayers have to deduct their Keogh

and IRA contributions on their Form 1040s, and then they have to report the distributions from the funds as income when they retire. Moreover, proponents of the "cash-flow" consumption tax would extend these requirements to all forms of saving. Our system would accomplish the same goal without any forms or record keeping.

#### **Capital Gains**

Capital gains on rental property, plant, and equipment would be taxed under the business tax. The purchase price would be deducted at the time of purchase, and the sale price would be taxed at the time of the sale. Every owner of rental real estate would be required to fill out the simple business tax return, Form 2.

Capital gains would be taxed exclusively at the business level and not at the personal level. In other words, our system would eliminate the double taxation of capital gains inherent in the current tax system. To see how this works, consider the case of the common stock of a corporation. The market value of the stock is the capitalization of its expected future earnings. Because the owners of the stock will receive their earnings after the corporation has paid the business tax, the market capitalizes expected aftertax earnings. A capital gain occurs when the market perceives that prospective aftertax earnings have risen. When the higher earnings materialize in the future, they will be correspondingly taxed. A tax system like the current one, with both an income tax and a capital gains tax, imposes double taxation. The goal of taxing all income exactly once can best be achieved by placing an airtight tax on the income at the source. With taxation at the source, it is inappropriate and inefficient to tax capital gains as they occur at the destination.

Another way to see that capital gains should not be taxed separately under the flat tax is to look at the national income accounts. Gross domestic product, the most comprehensive measure of the nation's command over re-

sources, does not include capital gains. The base of the flat tax is GDP minus investment, that is, consumption. To include capital gains in the flat-tax base would depart from the principle that it is a tax on consumption.

Capital gains on owner-occupied houses are not taxed under our proposal. Very few capital gains on houses are actually taxed under the current system. Gains can be rolled over, there is an exclusion for older home sellers, and gains are never taxed at death. Exclusion of capital gains on houses makes sense because state and local governments put substantial property taxes on houses in relation to their values. Adding a capital gains tax on top of property taxes is double taxation in the same way that adding a capital gains tax on top of an income tax is double taxation of business income.

#### Imports, Exports, and Multinational Business

With the North American Free Trade Agreement and the growth of trade throughout the world, U.S. companies are doing more and more business in other countries, and foreign companies are increasingly active here. Should the U.S. government try to tax business operations in other countries owned by Americans? And should it tax foreign-owned operations in the United States? These are increasingly controversial questions. Under the current tax system, foreign operations of U.S. companies are taxed in principle, but the taxpayer receives a credit against U.S. taxes for taxes paid to the country where the business operates. Because the current tax system is based on a confused combination of taxing some income at the origin and some at the destination, taxation of foreign operations is messy.

Under the consistent application of taxing all business income at the source, the flat tax embodies a clean solution to the problems of multinational operations. The flat tax would apply only to the domestic operations of all businesses, whether of domestic, foreign, or mixed ownership. Only the revenue from the sales of products within

the United States plus the value of products as they are exported would be reported on line 1 of Form 2. Only the costs of labor, materials, and other inputs purchased in the United States or imported to the United States would be allowable on line 2 as deductions for the business tax. Physical presence in the United States is the simple rule that determines whether a purchase or sale is included in taxable revenue or allowable cost.

To see how the business tax would apply to foreign trade, consider first an importer selling its wares within the United States. Its costs would include the actual amount it paid for its imports, valued as they entered the country. This would generally be the actual amount paid for them in the country of their origin. Its revenue would be the actual receipts from sales in the United States. Second, consider an exporter selling goods produced here to foreigners. Its costs would be all the inputs and compensation paid in the United States, and its revenue would be the amount received from sales to foreigners, provided that the firm did not add to the product after it departed the country. Third, consider a firm that sends parts to Mexico for assembly and brings back the final product for sale in the United States. The value of the parts as they leave here would count as part of the revenue of the firm, and the value of the assembled product as it returned would be an expense. The firm, for example, would not deduct the actual costs of its Mexican assembly plant.

Under the principle of taxing only domestic activities, the U.S. tax system would mesh neatly with the tax systems of our major trading partners. If every nation used the flat tax, all income throughout the world would be taxed once and only once. Because the basic principle of the flat tax is already in use in the many nations with value-added taxes, a U.S. flat tax would harmonize with those foreign tax systems.

Application of the wage tax, Form 1, in the world economy would follow the same principle. All earnings from work in the United States would be taxed, irrespec-

tive of the worker's citizenship, but the tax would not apply to the foreign earnings of Americans.

Choices about the international location of businesses and employment are influenced by differences in tax rates. The United States, with a low tax rate of 19 percent, would be much the most attractive location among major industrial nations from the point of view of taxation. Although the flat tax would not tax the overseas earnings of American workers and businesses, there is no reason to fear an exodus of economic activity. On the contrary, the favorable tax climate in the United States would draw in new business from everywhere in the world.

#### The Transition

In our flat tax proposal, we are spending the bulk of our effort in laying out a good, practical tax system. We have not made concessions to the political pressures that may well force the nation to accept an improved tax system that falls short of the ideal we have in mind. One area where the political process is likely to complicate our simple proposal is the transition from the current tax to the flat tax. The transition issues that are likely to draw the most attention are depreciation and interest deductions. In both cases, taxpayers who made plans and commitments before the tax reform will cry loudly for special provisions to continue the deductions.

Congress will face a choice between denying taxpayers the deductions they expected before tax reform or granting the deductions and raising the tax rate to make up for the lost revenue. Fortunately, this is a temporary problem. Once existing capital is fully depreciated and existing borrowing paid off, any special transition provisions can be taken off the books.

**Depreciation Deductions.** Existing law lets businesses deduct the cost of an investment on a declining schedule over many years. From the point of view of the business,

multiyear depreciation deductions are not as attractive as the first-year write-off prescribed in the flat tax. No business will complain about the flat tax as far as future investment is concerned. But businesses may well protest the unexpected elimination of the unused depreciation they thought they would be able to take on the plant and equipment they installed before the tax reform. Without special transition provisions, these deductions would simply be lost.

How much is at stake? In 1992, total depreciation deductions under the personal and corporate income taxes came to \$597 billion. At the 34 percent rate for most corporations (which is close to the rate paid by the individuals who are likely to take deductions as proprietors or partners), those deductions were worth \$192 billion. At the 19 percent flat rate, the deductions would be worth only \$108 billion.

If Congress chose to honor all unused depreciation from investment predating tax reform, it would take about \$597 billion out of the tax base for 1995. To raise the same amount of revenue as our original 19 percent rate would, the tax rate would have to rise to about 20.1 percent.

Honoring past depreciation would mollify business interest, especially in industries with large amounts of unused depreciation for past investment but little prospect of large first-year write-offs for future investment. In addition, it would buttress the government's credibility in tax matters by carrying through on a past promise to give a tax incentive for investment. On the other hand, the move would require a higher tax rate and a less efficient economy in the future.

If Congress did opt to honor past depreciation, it should recognize that the higher tax rate needed to make up for the lost revenue is temporary. Within five years, the bulk of the existing capital would be depreciated, and the tax rate should be brought back to 19 percent. From the outset, the tax rate should be committed to drop to 19 percent as soon as the transition depreciation is paid off.

Interest Deductions. Loss of interest deductions and elimination of interest taxation are two of the most conspicuous features of our tax reform plan. During the transition, there will be winners and losers from the change, and Congress is sure to hear from the losers. Congress may well decide to adopt a temporary transitional measure to help them. Such a measure need not compromise the principles of the flat tax or lessen its contribution to improved efficiency.

Our tax reform proposal calls for the parallel removal of interest deductions and interest taxation. If a transitional measure allows the continuation of deductions for interest on outstanding debt, it should also require the continuation of taxation of that interest as income of the lender. If all deductions are completely matched with taxation on the other side, then a transition provision to protect existing interest deductions would have *no* effect on revenue. In that respect, interest deductions are easier to handle in the transition than are depreciation deductions.

If Congress decides that a transitional measure to protect interest deductions is needed, we suggest the following. Any borrower may choose to treat interest payments as a tax deduction. If the borrower so chooses, the lender *must* treat the interest as taxable income. But the borrower's deduction should be only 90 percent of the actual interest payment, while the lender's taxable income should include 100 percent of the interest receipts.

Under this transitional plan, borrowers would be protected for almost all their existing deductions. Someone whose personal finances would become untenable if the mortgage-interest deduction were suddenly eliminated can surely get through with 90 percent of the earlier deduction. But the plan builds in an incentive for renegotiating the interest payments along the lines we discussed earlier. Suppose a family is paying \$10,000 in annual mortgage interest. They could stick with this payment and deduct \$9,000 of it per year. Their net cost, after subtracting the value of their deduction with the 19 percent tax rate, would

be \$8,290. The net income to the bank, after subtracting the 19 percent tax it pays on the whole \$10,000, would be \$8,100. Alternatively, the family could accept an arrangement proposed by the bank: the interest payment would be lowered to \$8,200 by rewriting the mortgage. The family would agree to forgo the right to deduct the interest, and the bank would no longer have to pay tax on the interest. Now the couple's cost will be \$8,200 (instead of \$8,290 without the arrangement) and the bank's income will be \$8,200 (instead of \$8,100). The family will come out \$90 ahead, and the bank will come out \$100 ahead. The arrangement would be beneficial to both.

One of the attractive features of this plan is that it does not have to make any distinctions between old borrowing, existing at the time of the tax reform, and new borrowing, arranged after the reform. Lenders would always require that new borrowers opt out of their deductions and would thus offer a correspondingly lower interest rate. Otherwise, the lender would be saddled with a tax bill larger than the tax deduction received by the borrower.

As far as revenue is concerned, this plan would actually add a bit to federal revenue in comparison with the pure flat tax. Whenever a borrower exercised the right to deduct interest, the government would collect more revenue from the lender than it would lose from the borrower. As more and more arrangements were rewritten to eliminate deductions and to lower interest, the excess revenue would disappear, and we would be left with the pure flat tax.

#### Variants of the Flat Tax

In this proposal, we have set forth what we think is the best flat tax. But our ideas are more general than this specific proposal. The same principles could be applied with different choices about the key trade-offs. The two most important trade-offs are:

• Progressivity versus tax rate. A higher personal allow-

ance would put an even lower burden on low- and middle-income families. But it would require a higher tax rate.

• Investment incentives versus tax rate. If the business tax had less than full write-off for purchases of capital goods, the tax rate could be lower.

Here are some alternative combinations of allowances and tax rates that would all raise the same amount of revenue:

Allowance for Family of Four	Tax Rate
\$12,500	15%
\$22,500	19%
\$34,500	23%

The choice among these alternatives depends on beliefs about how the burden of taxes should be distributed and on the degree of inefficiency that will be brought into the economy by the corresponding tax rates.

Here are some alternative combinations of investment write-offs and tax rates that would all raise the same amount of revenue:

Equipment Write-off	Structures Write-off	Tax Rate	
100%	100%	19%	
75%	50%	18%	
50%	25%	17%	

The choice among these alternatives depends on the sensitivity of investment and saving to incentives and on the degree of inefficiency brought by the tax rate.

#### Stimulus to Growth

The flat tax at a low, uniform rate of 19 percent will improve the performance of the U.S. economy. Improved incentives to work through increased take-home wages will

stimulate work effort and raise total output. Rational investment incentives will raise the total level of investment and channel it into the most productive areas. And sharply lower taxation of entrepreneurial effort will enhance this critical input to the economy.

Work Effort. About two-thirds of today's taxpayers enjoy the low-income tax rate of 15 percent enacted in 1986. Under the flat tax, more than half these taxpayers would face zero tax rates because their total family earnings would fall short of the exemption amount (\$22,500 for a family of four). The other half would face a slight increase in their tax rates on the margin, from 15 percent to 19 percent. In 1991, the remaining third of taxpayers were taxed at rates of 28 and 31 percent, and the addition of the 39.6 percent bracket in 1992 worsened incentives further. Heavily taxed people earn a disproportionate share of income: in 1991, 58 percent of all earnings were taxed at rates of 28 percent or higher. The net effect of the flat tax, with marginal rates of 0 and 19 percent, would be to improve incentives dramatically for almost everyone who is economically active.

One point we need to emphasize is that a family's marginal tax rate determines its incentives for all types of economic activity. There is much confusion on this point. Some authors, for example, have written that a married woman faces a special disincentive because the marginal tax on the first dollar of her earnings is the same as the marginal tax on the last dollar of her husband's earnings. It is true that incentives to work for a woman with a well-paid husband are seriously eroded by high tax rates. But so are her husband's incentives. What matters for both of their decisions is how much of any extra dollar of earnings they will keep after taxes. Under the U.S. income tax, with joint filing, the fraction either of them takes home after taxes is always the same, no matter how their earnings are split between them.

Sheer hours of work make up one of the most impor-

tant dimensions of productive effort and one that is known to be sensitive to incentives. At first, it may seem difficult for people to alter the amount of work they supply to the economy. Aren't most jobs forty hours a week, fifty-two weeks a year? It turns out that only a fraction of the work force is restricted in that way. Most of us face genuine decisions about how much to work. Teenagers and young adults—in effect anyone before the responsibilities of parenthood—typically work much less than full time for the full year. Improving their incentives could easily make them switch from part-time to full-time work or cause them to spend less time taking it easy between jobs.

Married women remain one of the largest underused resources in the U.S. economy, although a growing fraction enters the labor market each year. In 1993, only 58 percent of all women over fifteen were at work or looking for work; the remaining 42 percent were spending their time at home or in school but could be drawn into the market if the incentives were right. There is no doubt about the sensitivity of married women to economic incentives. Studies show a systematic tendency for women with low aftertax wages and high-income husbands to work little. Those with high aftertax wages and lower-income husbands work a lot. It is thus reasonable to infer that sharply reduced marginal tax rates on married women's earnings will further stimulate their interest in the market.

Another remarkable source of unused labor power in the United States is men who have taken early retirement. Although 92 percent of men aged twenty-five to fifty-four are in the labor force, only 65 percent of those from fifty-five to sixty-four are at work or looking for work and just 17 percent of those over sixty-five. Again, retirement is very much a matter of incentives. High marginal taxation of earnings discourages many perfectly fit men from continuing to work. Because mature men are among the best paid in the economy, a great many of them face marginal tax rates of 28, 36, or even 40 percent. Reduction to a uniform

19 percent could significantly reduce early retirement and make better use of the skills of older men.

Economists have devoted a great deal of effort to measuring the potential stimulus to work from tax reform. The consensus is that all groups of workers would respond to the flat tax by raising their work effort. A few workers would reduce their hours either because the flat rate would exceed their current marginal rate or because reform would add so much to their incomes that they would feel that earning was less urgent. But the great majority would face much improved incentives. The smallest expected responses are from adult men and the largest from married women.

In light of the research on labor supply, were we to switch from the current tax law to our proposed flat tax, a reasonable projection is an increase of about 4 percent in total hours of work in the U.S. economy. That increase would mean about 1.5 hours per week on the average but would take the form of second jobs for some workers, more weeks of work per year for others, and more hours per week for those working part time. The total annual output of goods and services in the U.S. economy would rise by about 3 percent, or almost \$200 billion. That is nearly \$750 per person, an astonishing sum. Of course, it might take some time for the full influence of improved incentives to have their effect. But the bottom line is unambiguous: tax reform would have an important favorable effect on total work effort.

Capital Formation. Economists are far from agreement on the impact of tax reform on investment. As we have stressed earlier, the existing system puts heavy tax rates on business income, even though the net revenue from the system is small. These rates seriously erode investment incentives. Generous but erratic investment provisions in the current law and lax enforcement of taxes on business income at the personal level, however, combine to limit the adverse impact. The current tax system subsidizes investment

through tax-favored entities such as pension funds, while it taxes capital formation heavily if it takes the form of new businesses. The result has been to sustain capital formation at reasonably high levels but to channel the investment into inefficient uses.

The most important structural bias of the existing system is the double taxation of business income earned in corporations and paid out to shareholders. Double taxation dramatically reduces the incentive to create new businesses in risky lines where debt financing is not available. On the other side, the existing system places no current tax on investments that can be financed by debt, where the debt is held by pension funds or other nontaxed entities. The result is a huge twist in incentives, away from entrepreneurial activities and toward safe, debt-financed activities.

The flat tax would eliminate the harmful twist in the current tax system. The flat tax has a single, uniform incentive for investment of all types; businesses would treat all purchases of capital equipment and buildings as expenses. As we noted earlier, allowing immediate write-off of investment is the ideal investment incentive. Taxing all income evenly and allowing expensing of investment amount to a tax on consumption. Public finance economists Alan Auerbach and Laurence Kotlikoff estimate that the use of a flat-rate consumption tax in place of an income tax would raise the ratio of capital stock to GDP from 5.0 to 6.2. Other economists are less optimistic that the correction of the double taxation of saving would provide the resources for this large an increase in investment. But all agree that there would be some favorable effect on capital formation.

In terms of added GDP, the increase in the capital stock projected by Auerbach and Kotlikoff would translate into 6 percent more goods and services. Not all this extra growth would occur within the seven-year span we are looking at. But, even allowing for only partial attainment in seven years and for a possible overstatement in

their work, it seems reasonable to predict a 2 to 4 percent increase in GDP on account of added capital formation within seven years.

Tax reform would improve the productivity of capital by directing investment to the most productive uses. Auerbach has demonstrated, in a paper published by the Brookings Institution, that the bias of the current tax system toward equipment and away from structures imposes a small but important burden on the economy. The flat tax would correct this bias. Auerbach estimates that the correction would be equivalent to a 3.2 percent increase in the capital stock. GDP would rise on this account by 0.8 percent.

Entrepreneurial Incentives and Effort. U.S. economic growth has slowed in the past two decades, and surely one reason is the confiscatory taxation of successful endeavors and the tax subsidy for safe, nonentrepreneurial undertakings. There are not any scholarly studies with quantitative conclusions on the general benefits from a fundamental shift, but they could be large.

Today's tax system punishes entrepreneurs. Part of the trouble comes from the interest deduction. The people in the driver's seat in the capital market, where money is loaned and borrowed, are those who lend out money on behalf of institutions and those who have figured out how to avoid paying income tax on their interest. These people do not like insecure loans to new businesses based on great new ideas. They do like lending secured to readily marketable assets by mortgages or similar arrangements. It is easy to borrow from a pension fund to build an apartment building, buy a boxcar, put up a shopping center, or anything else where the fund can foreclose and sell the asset in case the borrower defaults. Funds will not lend money to entrepreneurs with new ideas because the lenders are unable to evaluate what they could sell off in case of a default.

Entrepreneurs can and do raise money the hard way, by giving equity interests to investors. An active venture capital market operates for exactly this purpose. But the cost to the entrepreneur is high: the ownership given to the financial backers deprives the entrepreneur of the full gain in case things work out well.

Even with the best tax system, or no taxes at all, entrepreneurs of course would not be able to borrow with ordinary bonds or loans and thus capture the entire future profits of a new business. It is not easy to get other people to put money into a risky, innovative business. Equity participation by investors is a fact of life. But the perverse tax system greatly worsens the incentives for entrepreneurs. The combination of corporate and personal taxation of equity investments is actually close to confiscation. The owners of a successful new business are taxed first when the profits flow in, at 34 percent, and again when the returns make their way to the entrepreneur and the other owners. All of them are likely to be in the 40 percent bracket for the personal income tax, making the combined effective tax rate close to 60 percent. The entrepreneur first gives a large piece of the action to the inactive owners who put up the capital and then surrenders well over half the remainder to the government.

The prospective entrepreneur will likely be attracted to the easier life of the investor who uses borrowed money. How much easier it is to put up a shopping center, borrow from a pension fund or insurance company, and deduct everything paid to the inactive investor!

Today's discriminatory system taxes entrepreneurial success at 60 percent while it actually subsidizes leveraged investment. Our simple tax would put the same low rate on both activities. A huge redirection of national effort would follow. And the redirection could only be good for national income. While shopping centers, apartment buildings, airplanes, boxcars, medical equipment, and cattle have their place, tax advantages have made us invest far too much in them, and their contribution to income is correspondingly low. Real growth will come when effort

and capital flow back into innovation and the development of new businesses, the areas where taxation has discouraged investment. The contribution to income from new resources will be correspondingly high.

Total Potential Growth from Improved Incentives. We project a 3 percent increase in output from increased total work in the U.S. economy and an additional increment to total output of 3 percent from added capital formation and dramatically improved entrepreneurial incentives. The sum of 6 percent is our best estimate of the improvement in real incomes after the economy has had seven years to assimilate the changed economic conditions brought about by the simple flat tax. Both the amount and the timing are conservative.

Even this limited claim for economic improvement represents enormous progress. By 2002, it would mean that the income of each American would be about \$1,900 higher, in 1995 dollars, as a consequence of tax reform.

#### **Interest Rates**

The flat tax would pull down interest rates immediately. Today's high rates are sustained partly by the income-tax deduction for interest paid and the tax on interest earned. The tax benefit ameliorates much of the pain of high interest, and the IRS takes part of the income from interest. Borrowers tolerate high interest rates and lenders require them. The simple tax would permit no deduction for interest paid and put no tax on interest received. Interest payments throughout the economy would be flows of aftertax income, thanks to taxation of business income at the source.

With the flat tax, borrowers would no longer be so tolerant of interest payments, and lenders would no longer be concerned about taxes. The meeting of minds in the credit market, where borrowing equals lending, would in-

evitably occur at a lower interest rate. Potentially, the fall could be spectacular. Much borrowing is done by corporations and wealthy individuals, who face marginal tax rates of 34 and 40 percent. The wealthy, however, almost by definition, are the big lenders in the economy. If every lender and every borrower were in the 40 percent bracket, a tax reform eliminating deduction and taxation of interest would cut interest rates by a factor of 0.4—for example, from 10 to 6 percent. But the leakage problem in the United States is so great that the actual drop in interest would be far short of this huge potential. So much lending comes through the devices by which the well-to-do get their interest income under low tax rates that a drop by a factor of 0.4 would be impossible. Lenders taxed at low rates would be worse off if taxation were eliminated but interest rates fell by half. In an economy with lenders enjoying low marginal rates before reform, the meeting of the minds would have to come at an interest rate well above 0.6 times the prereform level. But the decline would be at least a fifth say, from 10 percent to 8 percent. Reform would bring a noticeable drop in interest rates.

One direct piece of evidence is municipal bonds, which yield interest not taxed under the federal income tax. Tax reform would make all bonds like tax-free municipals, so the current rates on municipals give a hint about the level of all interest rates after reform. In 1994, municipals yielded about one-sixth less interest than comparable taxable bonds. But this is a conservative measure of the likely fall in interest rates after reform. Today, taxfree rates are kept high because there are so many opportunities to own taxable bonds in low-tax ways. Why own a bond from the city of Los Angeles paying 6 percent tax free when an investor can create a personal pension fund and hold a Pacific Telesis bond paying 7 percent? Interest rates could easily fall to three-quarters of their present levels after tax reform; rates on tax-free securities would then fall a little as well.

34

The decline in interest rates brought about by putting interest on an aftertax basis would not by itself change the economy very much. To Ford Motors, contemplating borrowing to finance a modern plant, the attraction of lower rates would be offset by the cost of lost interest deductions. But the flat tax would do much more than put interest on an aftertax basis. Tax rates on corporations would be slashed to a uniform 19 percent from the double taxation of a 34 percent corporate rate on top of a personal rate of up to 40 percent. And investment incentives will be improved through the first-year write-off. All told, borrowing for investment purposes would become a better deal. As the likely investment boom develops, borrowing will rise and will tend to push up interest rates. In principle, interest rates could rise to their prereform levels but only if the boom is vigorous. We cannot be sure what would happen to interest rates after tax reform, but we can be sure that high-interest, low-investment stagnation would not occur. Either interest rates will fall or investment will take off.

As a safe working hypothesis, we will assume that interest rates fall in the year after tax reform by about a fifth, say, from 10 to 8 percent. We assume a quiescent underlying economy, not perturbed by sudden shifts in monetary policy, government spending, or oil prices. Now, take a look at borrowing decisions made before and after reform. Suppose a prereform entrepreneur is considering an investment yielding \$1 million a year in revenue and involving \$800,000 in interest costs at 10 percent interest. Today the entrepreneur pays a 40 percent tax on the net income of \$200,000, giving an aftertax cash flow of \$120,000. After reform, the entrepreneur would earn the same \$1 million and pay \$640,000 interest on the same principal at 8 percent. There would be a 19 percent tax on the earnings without deducting interest; the amount of the tax is \$190,000. Aftertax income is \$1,000,000 - \$640,000 -\$190,000 = \$170,000, well above the \$120,000 before reform. Reform is to the entrepreneur's advantage and to the advantage of capital formation. Gains from the lower tax rate more than make up for losses from denial of the interest deduction.

How can it be that both the entrepreneur and the government come out ahead from the tax reform? They do not: one element is missing from this accounting. Before the reform, the government collected some tax on the interest paid by the entrepreneur—potentially as much as 40 percent of the \$800,000. But, as our stories about leakage make clear, the government is actually lucky to get a small fraction of that potential.

To summarize, the flat tax would automatically lower interest rates. Without an interest deduction, borrowers require lower costs. Without an interest tax, lenders are satisfied with lower payments. The simple flat tax would have an important effect on interest rates. Lower interest rates would also stimulate the housing market, offsetting the absence of the mortgage interest deduction, as will be explained below.

Housing. Everyone who hears about the flat tax, with no deductions for interest, worries about its effect on the housing market. Won't the elimination of the deduction depress the prices of existing houses and impoverish the homeowner who can afford a house only because of its interest deductions? Our answer to all these questions is no, but we freely concede that that issue is significant.

In all but the long run, house prices are set by the demand for houses, because the supply can change only slowly. If tax reform increases the cost of carrying a house of given value, then demand will fall, and house prices will fall correspondingly. For this reason, we will look closely at what happens to carrying costs before and after tax reform.

If tax reform had no effect on interest rates, its adverse effect on carrying costs and house values would be a foregone conclusion. A \$200,000 house with a \$120,000

mortgage at 10 percent has interest costs of \$12,000 per year before deductions and \$8,640 after deductions (for someone in the 28 percent tax bracket). The monthly carrying cost is \$720. Take away the deductions, and the carrying cost jumps to \$12,000 per year or \$1,000 per month. Inevitably, the prospective purchaser faced with this change would have to settle for a cheaper house. Collectively, the reluctance of purchasers would bring house prices down so that the buyers could afford the houses on the market.

As we stressed earlier, our tax reform will immediately lower interest rates. And lower rates bring higher house prices, a point dramatically impressed on homeowners in the early 1980s when big increases in interest severely dampened the housing market. The total effect of reform will depend on the relative strengths of the contending forces the value of the lost interest deduction against the value of lower interest. We have good reasons to think that interest rates would fall by about two percentage points—say, from 10 to 8 percent for mortgages. The value of the lost deduction, in contrast, depends on just what fraction of a house a prospective purchaser intends to finance. First-time home buyers typically, but not always, finance three-quarters or more of the price of a house. Some of them have family money or other wealth and make larger down payments. Families moving up by selling existing houses generally plan much larger equity positions in their new houses. Perhaps a down payment of 50 percent is the average, so families are paying interest (and deducting) on \$500 per thousand dollars of house.

A second determinant of the carrying cost is the value of the deduction, set by the marginal tax rate. Among homeowners, a marginal rate of 28 percent is typical, corresponding to a taxable income of \$37,000 to \$89,000. Interest-carrying costs per thousand dollars of house are \$50 per year before taxes (\$500 borrowed at 10 percent interest) and \$36 per year after taxes. When tax reform comes, the interest rate will fall to 8 percent, and carrying costs will be \$40 per thousand per year (\$500 at 8 percent) both

before and after taxes. Tax reform will put this buyer behind by \$4 per thousand dollars of house per year, or \$800 per year for the \$100,000 house.

If this \$800 per year were the end of the story, it would bring a modest decline in house prices. But there is another factor we have not touched on yet. The buyer's equity position—the down payment—must come from somewhere. By putting wealth into a house, the buyer sacrifices the return that wealth would have earned elsewhere. The alternative return from the equity in the house is another component of the carrying cost. Tax reform would almost surely reduce that component. As just one example, take a prospective buyer who could put wealth into an untaxed retirement fund if he did not put it into a house. The fund holds bonds; after reform, the interest rate on bonds would be perhaps three percentage points lower, and so the implicit cost of the equity would be lower by the same amount.

To take a conservative estimate, tax reform might lower the implicit cost of equity by one percentage point as interest rates fall. Then the carrying costs of the buyer's equity would decline by \$5 (\$500 at 1 percent) per thousand dollars of house per year. Recall that the buyer has come out behind by \$4 on the mortgage-interest side. On net, tax reform would *lower* the carrying costs by \$5 - \$4 = \$1 per thousand, or \$200 per year for the \$200,000 house. Then housing prices would actually rise under the impetus of tax reform.

We will not argue that tax reform per se would stimulate the housing market. But we do believe that the potential effects on house prices would be small, small enough to be lost in the ups and downs of a volatile market. Basically, reform would have two effects: to reduce interest rates and related costs of funds (and so to stimulate housing and other asset markets) and to deny interest deductions (and so to depress housing). To a reasonable approximation, these influences will cancel each other out.

If tax reform sets off a rip-roaring investment boom,

interest rates might rise in the years following the immediate drop at the time of the reform. During this period, when corporations will be competing strongly with home buyers for available funds, house prices would lag behind an otherwise brisk economy. The same thing happened in the great investment boom of the late 1960s. But to get the strong economy and new jobs that go with an investment boom, minor disappointments in housing values would seem a reasonable price. In the long run, higher incomes will bring a stronger housing market.

What about the construction industry? Will a slump in new housing accompany a tax reform that banishes interest deductions, as the industry fears? The fate of the industry depends intimately on the price of existing housing. Were tax reform to depress housing by raising carrying costs, the public's interest in new houses would fall in parallel with its diminished enthusiasm for existing houses. Because tax reform will *not* dramatically alter carrying costs in one direction or another, it will not enrich or impoverish the construction industry.

So far, we have looked at the way prospective buyers might calculate what value of house they can afford. These calculations are the proximate determinants of house prices. But they have no bearing on the situation of an existing homeowner who has no intention of selling or buying. To the homeowner, loss of the tax deduction would be pure grief.

Our transition proposal takes care of the problem of existing mortgages without compromising the principles of the flat tax or diminishing its revenue. Homeowners would have the right to continue deducting 90 percent of their mortgage interest. Recall that the bank would then be required to pay tax on the interest it received, even though interest on new mortgages would be untaxed. Homeowners could expect to receive attractive propositions from their banks to rewrite their mortgages at an interest rate about three percentage points lower, but without tax deductibility. Even if banks and homeowners could not

get together to lower rates, homeowners could still deduct 90 percent of what they deducted before.

#### **Conclusions**

The flat tax comes with strong recommendations. It would bring a drastic simplification of the tax system. It imposes an across-the-board consumption tax at the low rate of 19 percent. It raises enough revenue to replace the existing personal and corporate income taxes. Through consistent use of the source principle of taxation, it would drastically limit the leakage that pervades today's taxes based on the destination principle. The flat tax is progressive: it exempts the poor from paying any tax and imposes a tax that is a rising share of income for other taxpayers. The economy would thrive under the improved incentives that the flat tax would provide.

### Note

1. Editor's Note: To economists, a consumption tax is frequently described as a tax on wages plus a tax on capital. A flat tax is a consumption tax because it taxes wages to individuals and it taxes capital income minus investment to firms. For a simple explanation as to why the flat tax is a consumption tax, see Jane Gravelle, "The Flat Tax and Other Proposals: Who Will Bear the Tax Burden," in Tax Notes, December 18, 1995.

# Fairness and Efficiency in the Flat Tax

Robert E. Hall, Alvin Rabushka, Dick Armey, Robert Eisner, and Herbert Stein

THE AEI PRESS

Publisher for the American Enterprise Institute
WASHINGTON, D. C.