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The Flat Tax: A Simple, Progressive Consumption Tax

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Tax forms truly 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 puts a low tax rate on a comprehensive definition of income. Because its base is so broad, the tax rate is an astonishingly low 19 percent but raises the same revenue as does the current tax system. The tax on families is fair and progressive—the poor pay no tax at all, and the fraction of income that a family pays rises with income. The system is simple and easy to understand. And the tax operates on the consumption tax principle—families are taxed on what they take out of the economy, not what they put into it.

Our system rests on a basic administrative principle: 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—like fringe benefits—are never taxed at all. Other kinds, like 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 clever taxpayers arrange to receive interest beyond the reach of the IRS.

Under our plan, all income is taxed at the same rate. Equality of tax rates is

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a basic concept of the flat tax whose logic is much more profound than just the simplicity of calculation with a single tax rate. Whenever different forms of income are taxed at different rates or different taxpayers face different rates, the public figures out how to take advantage of the differential.

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 is progressive. Instead, all citizens, rich and poor alike, pay essentially the same fraction of their spending in taxes. We reject sales and value-added taxes for this reason. 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, provides 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 it is high-income taxpayers who 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 of 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. Saving is untaxed, thus solving the problem that has perplexed the designers of the current tax system, which contains an incredible hodgepodge of saving and investment incentives. As a general matter, the current system puts substantial taxes on the earnings from savings. On that account, the economy is biased toward too little saving and too much consumption. But Congress has inserted a number of special provisions to spur saving. Most important, saving for retirement is excused from current taxation. Workers are not taxed on the amount their employers contribute to pension funds, and the employers can deduct those contributions. The self-employed can take advantage of the same opportunity with Keogh and individual retirement account (IRA) plans. The overall effect of the existing incentives is spotty—there are excessive incentives for some saving-investment channels and inadequate incentives for others. In our system, there is a single, coherent provision for taxing the return to saving. All income is taxed, but the earnings from saved income are not taxed further.

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 applies to both businesses and individuals. Although our system has two separate tax forms—one for business income and the other for wages and salaries—it is an integrated system. When we speak of its virtues, such as its equal taxation of all types of income, we mean the system, not one of its two parts. As we will explain, the business tax is not just a replacement for the existing corporate income tax. It covers all businesses, not just corporations. And it covers interest income, which is currently taxed under the personal income tax.

In our system, all income is classified as either business income or wages (including salaries and retirement benefits). The system is airtight. Taxes on both types of income are equal. The wage tax has features to make the overall system progressive. Both taxes have postcard forms. The low tax rate of 19 percent is 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 truly 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. The value-added tax works just that way. But the value-added tax is unfair because it is not progressive. That's why we break the tax in two. The firm pays tax on all the income generated at the firm except the income paid to its workers. The workers themselves pay tax on what they earn, and the tax they pay is progressive.

To measure the total amount of income generated at a business, the best approach is to 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

The other piece is the wage tax. Each family pays 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 is total wages, salaries, and retirement benefits less the total amount of family allowances.

We calculate flat tax revenue from the U.S. National Income and Product Accounts for 1993 (see table 1). 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 three, 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 four, would be reported by the firm's workers on their wage tax forms and would be deducted by businesses. Investment, line five, 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 six shows the taxable income of all businesses after they have deducted their wages and investment. The revenue from the business tax, line seven, is 19 percent of the tax base on line six. Line eight shows the amount of family allowances that would be deducted. The wage tax base on line nine shows the amount of wages, salaries, and pensions left after deducting all family allowances from the amount on line four. The wage tax revenue on line ten is 19 percent of the base. Total flat tax revenue on line eleven is \$627 billion. Lines twelve and thirteen show the actual revenue from the personal and corporate income tax. The total actual revenue on line fourteen is also \$627 billion. The 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 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 more than half the current corporate rate. The flat business tax yields more revenue than does the existing corporate tax for two main reasons: First, slightly more than half of business income is from noncorporate businesses—professional partnerships, proprietorships, and the like. Second, the business tax puts a tax on fringe benefits, which escape taxation in the current system.

The substantial revenue the government would derive from the flat business tax is the key to the fairness of our tax system. Because most business income

Table 1 Flat Tax Revenues Compared with Current Revenues

The Flat Tax

Line	Income or Revenue	Billions of 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 one minus lines two through five)	1,903
7	Business tax revenue (19 percent of line six)	362
8	Family allowances	1,705
9	Wage tax base (line four less line eight)	1,395
10	Wage tax revenue (19 percent of line nine)	265
11	Total flat tax revenue (line seven plus line ten)	627
12	Actual personal income tax	510
13	Actual corporate income tax	118
14	Total actual revenue (line twelve plus line thirteen)	627

goes to the rich, putting an airtight tax of 19 percent on that income permits tax rates on working people to be lowered.

The other side of the coin, of course, is that our wage tax would yield less revenue than does the current personal income tax—\$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 applies 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 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 yields so much more revenue than does the corporate tax.

THE INDIVIDUAL WAGE TAX

The individual wage tax has a single purpose—to tax the large fraction of total income that employers pay as cash to their workers. It is not a tax system by itself but one of two major parts of the complete system. The base of the 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 are not counted as part of wages. In other words, the tax on pension income is paid when the retired worker actually receives the pension, not when the employer sets aside the money to pay the future pension. This

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Form	1 Individual	Wage Tax				1995
Your first name and initial (if joint return, also give spouse's name and		Last name		Your	social secui	ity number
Present	home address (number and street including apartment number or n	ural roule)		Spou	se's social s	ecurity no.
Oity, tow	wn, or post office, state, and ZIP code	Your occupation≯			i	i
		Spouse's occupation>				
1	Wages and salary	***************************************	1	1		
2	Pension and retirement benefits		2	┨		
3	Total compensation (line 1 plus line 2)	***************************************	3	ļ	**********	
4	Personal allowance	*******************************		ţ		-
	(a) Q \$16,500 for married filing jointly	********************************			•••••	
	(b) D \$9,500 for single	***************************************	46b		•••••	
	(c) \$14,000 for single head of household		4(c	4		
5	Number of dependents, not including spouse		5			
6	Personal allowances for dependents (line 5 multipi	ied by \$4,500)	. 6	↓	••••••	
7	Total parsonal showar los (in a + plus in a U)		7	4		
8				ļ		
9	(9	↓	••••••	
10	Tax withheld by employer		10			
11	Tax due (line 9 less line 10, if positive)	••••••	11		• • • • • • • • • • • • • • • • • • • •	
12	Refund due (line 10 less line 9, if positive)		12	1	·····	

principle applies even 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, IRA, or SEP fund.

The tax form for our wage tax is self-explanatory. To make the tax system progressive, only earnings over a personal or family allowance are taxed. The allowance is \$25,500 for a family of four in 1995 but would rise along with the cost of living in later years. All the taxpayer has to do is report total wages, salaries, and pensions at the top, 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 (see form 1). 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 don't 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.

Anyone who is self-employed or pays expenses directly in connection with making a living will need to file the business tax in order to get the proper deduction for expenses. Fortunately, the business tax form is even simpler than the wage tax form.

THE BUSINESS TAX

The Flat Tax

It's not the purpose of the business tax to tax businesses. Fundamentally, people pay taxes, not businesses. The idea of the business tax is 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 avoids 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 the source is possible because we already know the tax rate of all of 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 becomes a problem. If each owner is 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 in order 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 wouldn't work. Business taxes have to be collected at the destination, from the owners, if graduated rates are to be applied. Source taxation is only practical when a single rate is applied to all owners. Because source taxation is so much more reliable and inexpensive, there is a powerful practical argument for using a single flat rate for all business income.

The business tax is a giant, comprehensive withholding tax on all types of income other than wages, salaries, and pensions. It is carefully designed to tax every bit of income outside of wages but to tax it only once. The business tax does 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 receive from business activity has already been taxed. Because the tax has already been paid, the tax system does not need to worry about what happens to interest, dividends, or capital gains after these types of income leave the firm. The resulting simplification and improvement in the tax system are enormous. Today the IRS receives more than a billion Form 1099s, which keep track of interest and dividends, and 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 originated 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 tax is not arbitrary—on

Form 2 Business Tax			1995
Busines	s Name		Employer identification Number
Street Address			
City, Sta	ele, and ZIP Code		Principal Product
1	Gross revenue from sales	1	L
2	Allowable costs	1 1	
	(a) Purchases of goods, services, and materials		
	(b) Wages, salaries, and pensions		
•	(c) Purchases of capital equipment, structures, and land		
4	Taxable income (line 1 less line 3)		
5	Tax (19% of line 4)		
6	Carry-forward from 1994		
7	Interest on carry-forward (6% of line 6)	7	
	Carry-forward into 1995 (line 6 plus line 7)	. 8	
9	Tax due (line 5 less line 8, if positive)	. 9]
10	Carry-forward to 1996 (line 8 less line 5, if positive)	10	

the contrary, it is dictated by the principles we set forth at the beginning of this chapter. 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
- 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 derives from the sale of its products and services. On the top line of the business tax form (see our form 2) goes the gross sales of the business—its proceeds from the sale of all of its products. But some of the proceeds come from the resale of inputs and parts the firm purchased; the tax has already been paid on these items because the seller also has to pay the business tax. Thus, the firm can deduct the cost of all the goods, materials, and services it purchases for the purpose of making the product it sells. In addition, it can deduct its wages, salaries, and pensions, for, under our wage tax, the taxes on these will be paid by the workers receiving them. Finally, the business can deduct all its outlays for plant, equipment, and land. Later we will explain why this investment incentive is just the right one.

Everything left from this calculation is the income originating in the firm and is taxed at the flat rate of 19 percent. In most businesses, a lot is left, so the prospective revenue from the business tax is the \$362 billion we computed earlier. Many deductions allowed to businesses under current laws are 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 and 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 don't deny depreciation deductions, we enhance them. More on this shortly.

Fringe benefits are outside the current tax system entirely, which makes no sense. The cost of fringes is deductible by businesses, but workers are not taxed on the value of the fringes. Consequently, fringes have a big advantage over cash wages. As taxation has become heavier and heavier, fringes have become more and more important in the total package offered by employers to workers—fringes 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 fringes is strictly an artifact of taxation, and fringes are an economically inefficient way to pay workers. Were the tax system 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 fringes means taxes on other types of income are all the higher. Bringing all types of income under the tax system is essential for low 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 well-defined

number obtained directly from the business's accounting records. Line one, 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 two(a) 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 two(b) 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 two(c) reports purchases of new and used capital equipment, buildings, and land. Note that the firm won't have to agonize over whether a screwdriver is a capital investment or a current input—both are deductible, and the IRS won't care which line it appears on.

The taxable income computed on line four bears little resemblance to anyone's notion of profit. The business tax is not 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 may well have a low or even negative taxable income. That's fine—later, when expansion slows but sales are at a high level, the income generated at the firm will be taxed at 19 percent.

Because the business tax treats investment in plant, equipment, and land as an expense, companies in the start-up period will have negative taxable income. But the government will not write a check for the negative tax on the negative income. Whenever the government has a policy of writing checks, clever people abuse the opportunity. Instead, the negative tax would be carried forward to future years, when the business should have positive taxable income. There is no limit to the number of years of carry-forward. Moreover, balances carried forward will earn the market rate of interest (6 percent in 1995). Lines six through ten 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 pile 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 heav-

ily. Investment incentives 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—treating the total amount of investment as an expense in the year it was made. The entire incentive for capital formation is 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 need not quarrel, as they do now, over what is an investment and what is a current expense. The distinction doesn't matter for the tax. Complicated depreciation calculations carrying over from one year to the next, driving the small business owner to distraction, will vanish from the tax form. The even more complicated provisions for recapturing depreciation when a piece of equipment or a building is sold will 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 what they put in. The flat tax, with expensing of investment, is precisely a consumption tax.

Expensing investment eliminates the double taxation of saving; this is another way to express the most economically significant feature of expensing. Under an income tax, people pay tax once when they earn and save and again when the savings earn a return. With expensing, the first tax is abolished. Saving is, in effect, deducted in computing the tax. Later, the return to savings is taxed through the business tax. Although economists have dreamt 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 is 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 is a tax of \$190 on the earnings but also a deduction worth \$190 in reduced taxes for the equipment purchase. On net, there is no tax. The taxpayer has not consumed any of the original \$1,000 either. Later, the taxpayer will receive business income representing the earnings of the machine. This income will be taxed at 19 percent. If the taxpayer chooses to consume rather than invest again, there will be a 19 percent tax on the consumption. So the overall effect is a 19 percent consumption tax.

Most people don't 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, and businesses who have 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 of the after-tax 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 the same returns as does a stock selling for the same price, which in turn is equal to the after-tax earnings of the machine, so it won't matter how the taxpayer invests the \$810. In all cases, there is effectively no tax for saved income; the tax is only payable 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-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, not at the personal level. Thus, 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 future earnings. Because the owners of the stock will receive their earnings after the corporation has paid the business tax, the market capitalizes after-tax earnings. A capital gain occurs when the market perceives that prospective after-tax earnings have risen. When the higher earnings materialize in the future, they will be correspondingly taxed. In a tax system like the current one, with both an income tax and a capital gains tax, there is double taxation. To achieve the goal of taxing all income exactly once, the best answer is to place 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 resources, 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 American business operations in other countries? And should it tax foreign 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 applies 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 one of the business tax 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 two 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 was returned would be an expense. The firm 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 nicely 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, irrespective 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 advocacy of the flat tax, 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 transitions 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. In order to raise the same amount of revenue as our original 19 percent rate, the tax rate would have to rise to about 20.1 percent.

Honoring past depreciation would mollify business interests, 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

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a past promise to give a tax incentive for investment. By contrast, 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 would be temporary. Within five years, the bulk of the existing capital would be depreciated and the tax rate 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. Important economic changes would take place once interest is put on an after-tax basis. 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 calls for the parallel removal of interest deduction 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 of 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. Suppose a family is paying \$10,000 in annual mortgage interest. It could stick with this payment and deduct \$9,000 of it per year. Its net cost, after subtracting the value of its 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 a deal proposed by the bank: The interest payment would be lowered to \$8,200 by rewriting the mortgage. The family

would agree to forgo its 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 deal), and the bank's income will be \$8,200 (instead of \$8,100 without the deal). The family will come out \$90 ahead, and the bank will come out \$100 ahead. The deal will be beneficial to both.

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One of the nice 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 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 to 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 deals were rewritten to eliminate deductions and lower interest, the excess revenue would disappear and we would be left with the pure flat tax.

Variants of the Flat Tax

In this chapter, 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 allowance 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

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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 investmentsaving 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 overall 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 of 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. For example, some authors have written that married women face 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 important 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 workforce 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 underutilized 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 after-tax wages and high-income husbands to work little. Those with high after-tax wages and lower incomes 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—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 im-

proved incentives. The smallest responses are from adult men and the largest from married women.

In the 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, as well as 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 its 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 business. 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 and 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. A tax system that taxes all income evenly and allows expensing of investment is 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 gross national

product 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 would 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 of 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 aren't any scholarly studies with quantitative conclusions on the overall 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 individuals who have figured out how to avoid paying income tax on their interest. These people don't 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's 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 won't lend money to entrepreneurs with new ideas because they 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.

So far we have just described the harsh reality of trying to get other people to

government.

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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.

put up the capital and then surrenders well over half of the remainder to the

Today's absurd 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. There is nothing wrong with shopping centers, apartment buildings, airplanes, boxcars, medical equipment, or cattle; but 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 confiscatory 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 each American will have an income 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 interest 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 will be flows of after-tax income, thanks to taxation of business income at the source.

With the flat tax, borrowers will no longer be so tolerant of interest payments and lenders will no longer be concerned about taxes. The meeting of minds in the credit market, where borrowing equals lending, will inevitably occur at a lower interest rate. Potentially, the fall could be spectacular. Much borrowing comes from 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 gives 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, tax-free 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 you 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.

The decline in interest rates brought about by putting interest on an after-tax 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 will do much more than put interest on an after-tax basis. Tax rates on corporations will 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 first-year write-off. All told, borrowing for investment purposes will 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 can't be sure what will happen to interest rates after tax reform, but we can be sure that high-interest, low-investment stagnation will 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 after-tax flow of \$120,000. After reform, the entrepreneur will earn the same \$1 million and pay \$640,000 interest on the same principal at 8 percent. There will be a 19 percent tax on the earnings without deducting interest; the amount of the tax is \$190,000. After-tax income is \$1,000,000-\$615,000-\$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 don't—there is one element 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 automatically lowers interest rates. Without an interest deduction, borrowers require lower costs. Without an interest tax, lenders are satisfied with lower payments. The simple flat tax will have an important effect on interest rates. Lower interest rates will also stimulate the housing market, a matter of great concern to almost everybody.

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 deduc-

tion depress the prices of existing houses and impoverish the homeowner who can only afford a house because of its interest deductions? Our answer to all of these questions is no, but we freely concede that there is a significant issue here.

In all but the long run, house prices are set by the demand for houses because the supply can only change 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 are going to look pretty intensively at what happens to carrying costs before and after tax reform.

If tax reform had no effects 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 already indicated that there are good reasons to think interest rates would fall by about 2 percentage points—say from 10 to 8 percent for mortgages. The value of the lost deduction, by 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 large 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 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 haven't touched on yet.

To take a conservative estimate, tax reform might lower the implicit cost of equity by 1 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 won't argue that tax reform will stimulate the housing market. But we do feel that the potential effects on house prices are small—small enough to be lost in the ups and downs of a volatile market. Basically, reform has 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.

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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, the homeowner could still deduct 90 percent of what he 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.