

Institute For Research On The Economics Of Taxation

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The Economics of Taxation and the Issue of Tax Reform

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by

Stephen J. Entin President and Executive Director

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The debate over tax cuts and tax reform is one of the most important issues facing the country today. Some background in the basic concepts of economics, taxation, and public finance and how they have evolved over time would be helpful in sorting through the issues.

Economists cannot perform controlled experiments with the economy the way that chemists can experiment in the lab. We have to wait for events in the real world to shed light on the validity of various economic theories. The Great Depression shook then-prevailing views on economics and led to the development of Keynesian economic theory. Less spectacularly, events of the 1960s and 1970s revived questions about the Keynesian approach. The result was renewed interest in certain "classical" economic precepts involving monetary theory (Monetarism) and the effects of taxation on individual behavior (Neo-Classical Economics).

(Chart 1.) The 1970s were a decade of generally worsening inflation, including two bursts of inflation related to two major oil shocks and accompanying Federal Reserve policy changes. At the same time, the rate of economic growth and the level of employment were generally deemed unsatisfactory, resulting in a new term to describe the economy — stagflation. Over the decade, inflation and unemployment were trending upward. Interest rates were rising. Productivity and real income growth, after taxes, began to slip. There were price and wage controls, energy shortages and rationing, bitter labor disputes, and no apparent way out under then-prevalent economic theories.

Over the next two decades, however, inflation, unemployment and interest rates were generally on the decline, and real after-tax incomes were rising. The energy shortages ended, and decontrolled energy prices, in real terms, slipped to their lowest levels since the 1950s. The events of the 1970s had an effect on economic thinking, and some of the resulting changes in theory and policy had a hand in reversing the unfavorable economic trends of that decade.

Keynesian, Monetarist, and Neoclassical Economics

The Keynesian approach to economic theory had difficulty dealing with the rising inflation and unemployment of the 1970s. Keynesian theory describes government economic policies as acting primarily on aggregate demand — monetary policy by adjusting the money supply, federal spending by acting directly on total outlays, and tax policy by raising or lowering disposable income. Fiscal actions were assumed to be stronger than monetary influences. Within the fiscal arena, spending was thought to dominate tax effects.

The Keynesian theory predicts a fairly rigid and unavoidable trade-off between lower unemployment and higher inflation (the "Phillips Curve"). If policies were set to stimulate demand to fight a recession and reduce unemployment, inflation would get worse. If policies





* Quarterly data from 1965-I to 1988-IV.

** Monthly data from January 1965 to December 1988.

were set to retard demand to fight inflation, recession and unemployment would get worse. That relationship, if valid, would preclude independently setting targets for inflation and unemployment. In particular, it was thought to be impossible to aim for price stability without an unacceptably high level of unemployment. The rising trends in inflation and unemployment during the 1970s contradicted the Phillips curve notion, and the theory left policy makers with the unattractive prospect of requiring a prolonged recession to wring stubborn inflationary expectations out of the system.

Beginning in the early 1960s, however, a number of changes in federal tax and monetary policies cast doubt on the idea that fiscal policy primarily influences demand in the predicted manner. There were instances in which monetary policy and fiscal policy moved in opposite directions, with the monetary policy seeming to dominate. There were notable differences in the results of various types of tax changes that should have had similar effects on demand.

Three monetarist and neo-classical views began to gain acceptance. The first new view was that monetary policy is the strongest determinant of nominal demand, but that ultimately most of its impact is on the price level rather than on real output (which is determined by real factors and market forces) and that price stability is actually better for growth than inflation. The second point was that fiscal policy does not primarily affect nominal demand and inflation; it primarily affects the mix and level of real output. The third point was that tax policy affects economic behavior by changing relative prices, not disposable income. In particular, taxes affect the choice of using one's time for labor or for leisure, and the choice of using income for, on the one hand, saving and investment, or, on the other hand, consumption.

These monetarist and neo-classical ideas became the intellectual basis of a new set of economic policies implemented by the federal government and the Federal Reserve in the 1980s. This new analytical framework also affected policy in the United Kingdom beginning in 1979, and, more recently, has had an influence on governments around the world.

The new analytical framework led to a set of policies designed to fight inflation, promote real growth and reduce unemployment simultaneously. That policy mix involved four steps:

- Slowing the rate of growth of the money supply to reduce nominal demand and inflation;
- Reducing the growth of government spending to free real resources for use in the private sector and to reduce government preemption of scarce saving;
- Reducing statutory marginal income tax rates and eliminating instances of multiple taxation of income in the definition of the tax base to increase rewards for work, saving, and investment to promote real growth; and

• Reducing regulations and privatizing government activities to increase the efficiency and lower the cost of production.

Keynesian emphasis on macroeconomics and aggregate demand

Keynesian economics pictures fiscal policy as acting upon the total spending on goods and services in the economy by individuals, businesses and government. This spending is called "aggregate demand". Keynesian economics seeks to control the economy by managing the size of aggregate demand. This is the main objective of Keynesian *macroeconomics*, which seeks to control the economy as a whole.

(Chart 2.) In the Keynesian view, aggregate demand can be expanded by 1) faster money creation by the central bank, 2) increasing government spending, and 3) cutting taxes to give individuals and businesses more disposable income to spend. This is pictured in the Keynesian model as an outward shift in the "aggregate demand curve", which shows the schedule of demand for all the goods and services that would be forthcoming at various price levels in the economy.

The other curve is the "aggregate supply curve", which shows the amount of production of goods and services that would be forthcoming at different price levels. The aggregate supply curve reflects the cost of obtaining the quantities of labor and capital needed to produce various



Chart 2 Keynesian Demand Management

amounts of output. Below full employment and full utilization of capacity, additional output may be obtained at a rising cost. At full employment and full utilization of capacity, additional output may not be obtained; additional demand will only raise prices.

In the Keynesian model, stimulative policy, either fiscal or monetary, moves the economy to a higher level of output and a higher level of prices (from the initial equilibrium point E_0 to the new equilibrium point E_1) by moving the demand curve. The aim of economic policy is to keep demand at just the right level to achieve full employment output (Y₁) without triggering inflation.

Monetarist emphasis on the effect of money on demand

In the 1960s, monetarist economists, such as Milton Friedman at the University of Chicago and others, objected to this Keynesian view of demand management. Friedman pointed out that government spending must be paid for either by taxes or by government borrowing, and, therefore, that changes in the federal budget deficit have little impact on aggregate demand. In terms of Chart 2, a wider deficit will not shift the aggregate demand curve.

An increase in government spending will not increase aggregate demand if it is financed by borrowing, because higher government borrowing will "crowd out" an equal amount of borrowing by investors and consumers, and thereby curtail private demand to offset the increase in government demand. An increase in government spending financed by taxes will likewise reduce private demand by reducing private consumption or, more likely, by reducing private saving and investment. A tax cut in the absence of a spending cut must be financed by higher government borrowing, which borrows back the increase in disposable income and prevents an increase in aggregate demand.

(Chart 3a.) Monetarists agreed that faster money creation by the central bank would increase aggregate demand. In a monetarist world, the only time that a fiscal deficit increases aggregate demand is if the central bank "accommodates" the fiscal change with faster money growth (brought about by the Fed's buying the added federal debt), in which case the stimulus is really from the change in monetary policy, not fiscal policy. The increase in the money supply would shift the aggregate demand curve and move the economy from E_0 to E_1 in the short run.

However, monetarists believe that the economy is generally in or close to a state of full employment; therefore, faster money growth would increase not only demand, but also the cost of labor and capital and the cost of the goods and services they produce. The cost of production (supply) would rise because the public would quickly begin to expect higher prices and to demand higher wages and higher returns on capital to compensate. Therefore, both the demand curve and the short run (sloping) supply curve would shift upward, with output constrained by the full employment capacity of the economy, represented by the long run (vertical) supply curve.



There would be no lasting gain in real output, only an increase in the price level, with a new equilibrium at point E_2 .

(**Chart 3b**.) If the Federal Reserve kept trying to increase employment by continually increasing the money supply, there would be inflation, not just a one-time jump in the price level. As people's expectations adjusted to any given rate of inflation, supply costs would begin rising in step with demand, and any temporary benefit with regard to real output would fade. The Federal Reserve would have to raise the rate of growth of money and inflation to fool the public into increasing output again. As soon as that new rate of inflation became generally expected, supply costs would again catch up with demand, and output would again fall to its normal full employment level. Monetary policy cannot succeed in promoting abnormally high levels of employment or abnormally low levels of unemployment (below the non-accelerating inflation rate of unemployment, or "NAIRU"). Consequently, monetarists recommend that the Federal Reserve devote itself to price stability, and leave it to the markets to achieve the optimal level of real output and employment.

The monetarist criticism of Keynesian economics was generally supported by the events of the 1960s and 1970s. However, even if there is no role for fiscal policy in managing aggregate demand in the Keynesian manner, this does not mean that fiscal policy is unimportant, only that it must be viewed and used in a different way.

Microeconomic emphasis on supply — the excise effects of a tax

Fiscal policy, especially tax policy, has important *microeconomic* consequences. Microeconomics is the study of the behavior of individuals, businesses, and markets. It studies how these participants in the economy respond to changes in relative prices. In the microeconomic world, it is changes in prices (not changes in the government budget deficit) that drive economic behavior. By understanding the individual elements in the economy, we can develop a picture of how the economy as a whole behaves. The development of a picture of the whole economy that is consistent with *microeconomic* principles is the achievement of classical and neo-classical economics.

The Keynesian model does not distinguish one type of tax change from another. All that matters in a Keynesian model is how much the government revenues are initially cut or increased, that is, how much private sector spendable income is raised or lowered. Keynesians concern themselves with revenues and average tax rates, not with marginal tax rates and the price incentives they influence.

In a neoclassical or supply-side model, it is changes in marginal tax rates, not tax revenues, that are of critical importance. The revenue consequences are secondary. Marginal tax rates are the tax rates that apply to the next dollar of income that might be received if one were to work a bit longer, or save a bit more to acquire an extra dollar of interest, or invest more to earn an extra dollar of profit. It is the incremental tax on incremental income that determines whether incremental effort is worthwhile.

Changes in marginal tax rates affect the economy by changing two very important relative prices — the price of labor versus leisure, and the price of saving and investing versus consumption. Higher marginal tax rates on wages raise the price, in terms of hours of work, of obtaining market goods and services, relative to the price of an hour of leisure. Such tax increases raise the cost of labor to businesses and discourage work effort by individuals. Higher marginal tax rates on income from saving raise the cost, in terms of how much current consumption must be given up, of obtaining additional future income or future consumption. This discourages saving and encourages current consumption.

(**Chart 4**.) When an excise tax is imposed (or increased) on the sale of a product, the cost of the product to the consumer rises, and the price received by the producer falls. The spread between the consumer's price and the producer's receipt equals the tax. At the higher price, the consumer will wish to buy less of the product. At the lower price to the producer, the producer will wish to produce less. The quantity of production declines. If a tax is removed (or reduced) on a product, the price paid by the consumer falls and the price received by the producer increases. Output and consumption of the product will increase. The prices changes and the resulting changes in output are the "excise effect" of a tax.



Chart 4 Imposition Of A Tax

In Chart 4, the tax causes a drop in production from Q_0 to Q_1 . The tax per unit is Pc less Pp. The tax revenue is the tax per unit times the new reduced quantity of output, or (Pc-Pp)xQ₁. Note that the tax revenue is less than would have been the case if the tax had not reduced the quantity produced. The effect of the tax rate on the tax base must always be taken into consideration in the analysis of a tax revenue proposal.

The triangular area in Chart 4 is called the "tax wedge". It represents the loss of value of economic output — the "dead weight social loss" — of the tax. This value of the lost production exceeds the value of the resources that are released by the decline in output. Those released resources may find employment in the production of other products, in which case market output will be rearranged but will fall only modestly; or they may remain idle or disappear. Labor may retreat into leisure, capital may be disinvested, or natural resources may remain unused, in which case total market output will be depressed to a greater degree.

The tax increase may be thought of as shifting the supply curve backward to include the tax in the cost of production. The new supply curve is drawn to represent the gross-of-tax market price to the consumer. (The representation of a tax change as a shift in the supply curve is the source of the term "supply-side economics", which is sometimes used as another name for "neo-classical" theory.)





Chart 5c Tax Increases Reduce Economic Activity Long Before They Reduce Tax Revenues



(**Charts 5a, 5b, 5c**.) When a tax is imposed at a low rate, it brings in revenue while reducing output only slightly. As the tax rate is increased, output falls further, but revenue will rise if the percent increase in the tax rate exceeds the percent drop in output. At higher tax rates, the percent drop in the tax base may exceed the percent rise in the tax rate, and revenue will fall.

This interaction of the tax rate with the tax base in the generation of tax revenue is often depicted as the Laffer Curve, after professor Arthur Laffer. The top of the curve is the revenue maximizing point.

The revenue maximizing point is not the optimal tax rate, however, because the total cost of the tax to the society includes the dead-weight loss in the value of real output as well as the tax revenue sent to the government. The economically optimal tax rate is less than the revenuemaximizing rate, and government should stop spending at least by the point where the last thing it buys is worth more than its dollar cost by the amount of the marginal dead-weight loss of output caused by the tax collection.

Excise effects of marginal income and payroll tax rates

(**Charts 6a, 6b, and 6c**.) A tax may be imposed on labor and capital income as it is earned as well as on the sale of a product when the income is spent. Taxes on labor and capital income force up the cost of labor and capital, and force up the aggregate supply curve for the whole economy just as an excise tax on a product forces up the supply curve of a specific product. The tax in question could be the personal income tax or the payroll tax for social insurance. The quantity of capital is more sensitive to taxes than is the quantity of labor; capital is easily reproduced (elastic supply) and it takes a large change in the quantity of capital to make a large change in its rate of return. As for people's willingness to finance capital formation, people can always consume instead of save, or invest abroad instead of in the United States, if the rate of return on saving and investment is driven down by rising taxes. Labor options are less flexible. Most people must work to have a satisfactory income, and to some degree they must conform their hours of work to the requirements of their employers. (They have some choices — such as to take or reject overtime, to contribute a second earner from the family to the labor force, how long a vacation to take, and when to retire.)

(Chart 6c.) Taxes on capital hurt labor. Labor and capital work together to produce output. The more capital that a worker has to work with, the more productive he is. When markets clear, each factor of production is paid its marginal product — what an incremental unit of the factor adds to output and sales. That is, if employers find that they are able to boost output by \$20 by hiring an additional worker, that will be the going wage in a region. If technological changes occur, or if additional investment is affordable, that have the effect of boosting the marginal product of labor to, say, \$30 an hour, then employers will compete for added workers until the wage rises to \$30 an hour. Thus, the line that traces the "marginal



Chart 6b Effect of Tax On Desired Capital



Desired Amount of Capital



product of labor" is also the "demand curve" for labor. When there is a lot of capital per worker, the marginal product of labor and the demand for labor are high, and so are wages and employment. When there is little capital per worker, the marginal product of labor and the demand for labor are low, and so are wages and employment. Taxes that discourage capital formation reduce the demand for labor and lower wages and employment. In this manner, much of the burden of taxes on capital income is shifted to workers. Many economic studies indicate that labor would be better off with lower (or even zero) taxes on income from capital. Even if taxes on labor income were raised to offset the reduction in taxes on capital income, the pre-tax income of labor would rise by more than the tax liability, and after-tax wages would increase. (See Stephen J. Entin, "Tax Incidence, Tax Burden, and Tax Shifting: Who Really Pays the Tax?" *IRET Policy Bulletin*, No. 88, September 10, 2004)

Extending supply analysis to the macro economy

(Chart 7a and 7b.) Labor and capital are used in the production of every good and service. Consequently, personal and business tax rate increases may be drawn as shifting backward the aggregate supply curve for the whole economy, and a cut in tax rates on labor and capital earnings may be drawn as a shift outward in the aggregate supply curve for the whole economy.

Chart 7a is a picture of the effect of a *reduction* in the marginal tax rate on labor or capital income on the aggregate supply curve. Cutting the payroll tax rate or the personal marginal income tax rates would reduce the gross-of-tax cost of labor to the employer while raising the after-tax wage to the worker. Cutting the personal marginal income tax rates and the corporate tax rates, reducing the tax rate on capital gains, enhancing capital cost recovery allowances (depreciation write-offs), or implementing an investment tax credit, would reduce the gross-of-tax cost of capital to investors in plant and equipment. The supply of labor and capital services to the economy would increase, as suppliers of these services would be encouraged to substitute labor for leisure and saving for current consumption. The aggregate supply curve would shift outward. There would be greater output. The people furnishing additional labor and capital to the production process would be paid, and they would buy the added output with the added income (amounts demanded would increase with higher incomes along the aggregate demand curve). Output would expand from E_0 to E_1 . Real income and purchasing power, reflecting the higher real production of goods and services, would rise.

The increase in demand would not be due to the effect of the tax cut on disposable (netof-tax) income, but the to effect of the favorable incentives of the tax on the supply of labor and capital, and the resulting increase in employment, production, sales, and gross market earnings of the suppliers. The "first order" excise effect of the tax would lead first to the increase in aggregate supply, which would lead in turn to the "second order" income effect that would increase amounts demanded.

The effect on the nominal price level would depend on the response of the Federal Reserve. The outward shift in the aggregate short run supply curve represents an increase in the supply of labor and capital services which also expands the full employment capacity of the economy, which is the long run supply curve. Only if capacity rises with the tax change will there be a permanent rise in real output and income. There is no inflationary pressure from a supply-enhancing tax reduction. If the Federal Reserve were to keep the money supply on an unchanged path (as in Chart 7a), the added production would result in a lower price level, with more goods chasing the same amount of money. If the Federal Reserve were to increase the money supply in line with the faster expansion of real output, the short run supply curve and the demand curve would undergo a subsequent upward shift (as in Chart 7b) to keep the price level unchanged.

Dealing with stagflation

Dealing with the stagflation of the 1970s was a test case for the new economics. Inflation and unemployment were rising. Higher nominal incomes were forcing workers into higher tax brackets, raising their marginal tax rates. Higher inflation also raised tax rates on saving. Taxes were imposed on inflated interest earnings and capital gains, and the depreciation allowances for plant and equipment were not adjusted for inflation, raising the cost of capital.







In 1981, the Reagan Administration implemented an economic program designed to fight inflation and promote economic growth. The program consisted of reductions in marginal tax rates on labor and capital income, restraint of government spending, reduced regulation, and slower growth of the money supply. The reduction of government spending freed resources for private sector use. The reduction of regulation and marginal tax rates reduced the cost of production and augmented the supply of real output. The reduction of money growth reduced the growth of aggregate demand and inflation.

This combination of policies, some aimed at reducing inflation, and some aimed at increasing the supply of goods and services, permitted the expansion of the real economy and a reduction of inflation at the same time. The Keynesian economic framework, in which all policy tools were to be aimed at controlling aggregate demand, could not have handled both problems at once, even if the tools operated as perceived by the Keynesians.

The current tax system is still in need of reform

The tax code still raises revenue for the government in a highly complex, economically destructive manner. It employs high marginal tax rates imposed unevenly across individuals and across different types of economic activity. Some of the taxes and tax rates are explicit and visible to the taxpayer/voter. Other taxes and tax rates are disguised, which enables the government to obtain more revenue from the public without triggering a voter backlash.

High marginal tax rates, however arrived at, depress work, saving, investment, productivity, output, and income. Oppressive marginal tax rates trap the poor in poverty. They penalize people who would like to save for their retirement or to leave money to their children, thereby discouraging saving that would contribute to economic development and benefit everyone. Outrageously high marginal tax rates associated with Social Security benefits drive experienced older workers from the labor force.

What is meant by marginal tax rates?

(Chart 8.) The tax rates that matter are the marginal tax rates, the tax that would be imposed on the next unit of activity. Marginal tax rates govern the choice between working longer or taking more leisure, and between consuming more or saving more. In a tax system with exemptions and several tax brackets, marginal tax rates may be much higher than average tax rates (total tax as a percent of total income), and average tax rates rise with income. Chart 8 displays a simple hypothetical tax rate structure illustrating these points.

(**Chart 9a**.) In 2007, there are 6 marginal tax rates: 10%, 15%, 25%, 28%, 33%, and 35%. The chart shows the rates and the income levels to which they apply in 2007. These income levels are adjusted annually for inflation (tax indexing). Note that taxpayers continue to

Illustrative Tax Schedule							
Income		Тах					
\$0 to \$10,000	0% (exen	npt amount)					
\$10,000 to \$30,000	20% of am	ount over \$10,000					
Over \$30,000	\$4,000 plus 40% of amount over \$30,000						
Income, Tax, and Rates of Two Taxpayers							
	Taxpayer A	Taxpayer B					
Income	\$20,000	\$50,000					
Тах	\$2,000	\$12,000					
Average Rate	10% (2,000/20,000)	24% (12,000/50,000)					
Marginal Rate	20%	40%					

Chart 8 Average And Marginal Tax Rate Illustration

Chart 9a Individual Income Tax's Rate Schedules

2009 Tax Rate Schedules								
Single —	- Schedul	e X		Head of	Household	d — Schedı	ıle Z	
If taxable in	ncome is:	The tax is:	of the	If taxable in	ncome is:	The tax is:		of the
Over-	But not		amount	Over-	But not			amount
	over —		over —		over —			over —
\$0	\$ 8,350	10%	\$0	\$0	\$11,950		10%	\$0
8,350	33,950	\$835.00 + 15 %	8,350	11,950	45,500	\$1,195.00 +	15%	11,950
33,950	82,250	4,675.00 + 25%	33,950	45,500	117,450	6,227.50 +	25%	45,500
82,250	171,550	16,750.00 + 28%	82,250	117,450	190,200	24,215.00 +	28%	117,450
171,550	372,950	41,754.00 + 33%	5 171,550	190,200	372,950	44,585.00 +	33%	190,200
372,950		108,216.00 + 35%	372,950	372,950		104,892.50 +	35%	372,950
Married f	iling joint	ly — Schedule	Y-1	Married f	iling sepa	rately — So	chedu	le Y-2
If taxable in	ncome is:	The tax is:	of the	If taxable in	ncome is:	The tax is:		of the
Over-	But not		amount	Over-	But not			amount
	over —		over —		over —			over —
\$0	\$16,700	10%	\$0	\$0	\$8,350		10%	\$0
16,700	67,900	\$1,670.00 + 15%	16,700	8,350	33,950	\$835.00 +	15%	8,350
67,900	137,050	9,350.00 + 25%	67,900	33,950	68,525	4,675.00 +	25%	33,950
137,050	208,850	26,637.50 + 28%	137,050	68,525	104,425	13,318.75 +	28%	68,525
208,850	372,950	46,741.50 + 33%	208,850	104,425	186,475	23,370.75 +	33%	104,425
372,950		100,601.00 + 35%	372,950	186,475		50,447.25 +	35%	186,475

pay at the lower rates on the lower portions of their incomes as their incomes rise. Each marginal rate only applies to the portion of income that falls within its rate bracket.

(**Chart 9b**.) Prior to the 2001 Tax Act, there were five statutory marginal tax rates, 15%, 28%, 31%, 36%, and 39.6% for individuals. The 2001 Tax Act split the bottom tax bracket and created a new bottom tax bracket with a 10% tax rate. That Act also phased in a series of rate reductions due to be completed in 2006. The 2003 Tax Act brought those 2006 tax rates forward. (**Chart 9c**.) Bringing the rate reductions forward greatly increased the incentive effect of the 2001 tax cut. There was little immediate incentive to increase effort in 2001 and 2002, because the rate reductions were deferred for several years, and the tax cuts did little to speed the recovery from the 2001 recession until the rate reductions were accelerated. The inclusion of enhanced expensing (35% immediate write-off of new equipment investment in 2002/2003, and 50% expensing in 2003/2004) also sped the recovery. If not extended, the rate reductions will sunset at the end of 2010.

There have been periods with fewer tax brackets. The 1986 Tax Reform Act created three effective marginal tax rates. It cut marginal rates to 15% and 28%, with a 5% surtax creating a 33% "bubble" to recapture the "benefit" of the 15% rate, leading to a 28% flat rate on large incomes. The "bubble" was replaced by a regular 31% top tax rate in the 1990 Tax Act (effective 1991). The 1993 Tax Act added the 36% and 39.6% tax rates (the latter in the form of a 10% "surtax" on the 36% rate), bringing us to the situation prior to the 2001 Tax Act.

The corporate income tax also contains graduated tax rates, although businesses quickly reach the top rate of 35% (recently lowered to 32% for manufacturing in the FSC/ETI repeal). There is also a corporate "alternative minimum tax" (AMT). Firms subject to the AMT in one year may get the excess tax returned in later years if they exit the AMT. These deferred AMT credits from past years are eliminating most current corporate AMT revenue.

The individual AMT has statutory rates of 26% to 28% on a broader definition of personal taxable income, in which many tax deductions are disallowed above an exempt amount. However, the exempt amount is phased out for people over certain income levels, and people in the phase-out range pay effective AMT rates of 32.5% and 35%. The personal AMT is a serious problem for tax policy makers. It was initially intended to apply only to the wealthy, but is now affecting millions of middle income filers, especially those who have large families and live in high tax states. More taxpayers are affected each year because the exempt amount was not indexed for inflation. Prior to the 2001 Tax Act, the AMT exempt amounts were \$49,000 for married couples filing jointly, \$37,750 for singles. Subsequent Tax Acts temporarily raised the exempt amounts. Unless extended, however, the exempt amounts will revert in 2007. The exempt amounts are phased out at a rate of 25 cents on the dollar for joint filers with AMT income in excess of \$150,000 and singles with AMT income over \$112,500, which creates the effective rates of 32.5% and 35% mentioned above. The phaseout range is four times the

1986 Tax Reform Act*	1990 Tax Act	1993 Tax Act	200	01 / 2003 Tax A	cts	If Congress Lets Tax Cuts Sunset
1988 - 1990	1991 - 1992	1993 - 2000	2001	2002	2003 - 2010 [‡]	2011 -
			10% [†]	10%	10%	
15%	15%	15%	15%	15%	15%	15%
28%	28%	28%	27.5%	27%	25%	28%
33%**	31%	31%	30.5%	30%	28%	31%
28%		36%	35.5%	35%	33%	36%
		39.6%	39.1%	38.6%	35%	39.6%
* 1986 Tax Refo	orm Act had transitic	on rate for 1987, ful	lly effective in 1988			

Chart 9b Marginal Individual Income Tax Rates Under Old Law and 2001 / 2003 Tax Acts

** The 5% surtax recaptured the "benefit" of the initial 15% rate, creating the 33% "bubble"; marginal rate returned to 28% after taxpayer had lost all "benefit" from the 15% rate.

[†] Rebate in 2001 equivalent to 10% rate.

[‡] 2001 / 2003 Tax Acts sunset at end of 2010. Old rates return in 2011 in the absence of further legislation.





exempt amount, or \$232,000. Millions of AMT taxpayers face higher marginal tax rates under the AMT than under the ordinary income tax. these rates poison the differential tax rates on dividends and capital gains as well as other income.

(**Chart 10**.) When marginal tax rates are graduated (rise with income), they act as a set of escalating excise taxes that ultimately choke off effort. The higher one's productivity and income, the higher is the tax rate applied to an additional dollar of income, and the greater the discouragement of added effort. Chart 10 shows the taxpayer supplying labor up to the point where his top tax rate takes just enough out of his gross wage (the employer's willingness to pay him for an extra hour) to leave him only the net wage he demands for the last hour worked (his "supply price"). Tax rates in brackets below one's marginal income have no effect on incentives.

(Chart 11.) There have been periods with many more tax brackets and much higher tax rates than at present. Before the 1986 Tax Reform Act, there were up to 15 rates for joint filers. Rates ranged from 20% to 91% after the Korean War. The 1963 Kennedy tax cuts reduced the rates to a range of 14% to 70%. The 1969 Tax Act gradually cut the top rate on wages to 50%. Inflation in the 1960s and 1970s pushed people up through these tax brackets. "Bracket creep" raised taxes 16% for each 10% increase in prices and wages. Real tax revenues and tax burdens rose, encouraging the government to keep inflating. Marginal tax rates rose, reducing incentives to work and save, and contributing to stagflation.



Chart 10 The Tax Wedge

Chart 11
ECONOMIC RECOVERY TAX ACT OF 1981, TAX RATE SCHEDULES FOR 1981 - 1984
Joint Returns

	1981	1	19	82	19	83	19	84
Taxable Income Bracket	Tax at Low End of Bracket	Tax Rate on Income Bracket	Tax at Low End of Bracket	Tax Rate on Income Bracket	Tax at Low End of Bracket	Tax Rate on Income Bracket	Tax at Low End of Bracket	Tax Rate on Income Bracket
(dollars)	(dollars)	(percent)	(dollars)	(percent)	(dollars)	(percent)	(dollars)	(percent)
\$ 0 - 3.400	\$0	0%	\$0	0%	\$0	0%	\$0	0%
3.400 - 5.500	0	14	0	12	0	11	0	11
5,500 - 7,600	294	16	252	14	231	13	231	12
7,600 - 11,900	630	18	546	16	504	15	483	14
11,900 - 16,000	1,404	21	1,234	19	1,149	17	1,085	16
16,000 - 20,200	2,265	24	2,013	22	1,846	19	1,741	18
20,200 - 24,600	3,273	28	2,937	25	2,644	23	2,497	22
24,600 - 29,900	4,505	32	4,037	29	3,656	26	3,465	25
29,900 - 35,200	6,201	37	5,574	33	5,034	30	4,790	28
35,200 - 45,800	8,162	43	7,323	39	6,624	35	6,274	33
45,800 - 60,000	17,720	49	77,457	44	10,334	40	9,772	38
60,000 - 85,600	19,678	54	17,705	49	16,014	44	15,168	42
85,600 - 109,400	33,502	59	30,249	50	27,278	48	25,902	45
109,400 - 162,400	47,544	64	42,149	50	38,702	50	36,830	49
162,400 - 215,400	81,464	68	68,649	50	65,202	50	62,600	50
215,400 and over	117,504	70	95,149	50	91,702	50	89,100	50

(**Chart 12**.) The Economic Recovery Tax Act of 1981 (ERTA) reduced the marginal rate spread to 11% to 50% over four tax years, and, starting in 1985, began to index the exemptions, standard deduction, and bracket boundaries for inflation to eliminate bracket creep. Indexing is the only remaining piece of the 1981 tax cut, and is terribly important protection for taxpayers against Washington's appetite for money. Without it, effective tax rates would rise automatically with no vote in Congress. Tax indexing eliminates bracket creep due to inflation and cost-of living increases, but it does not protect against bracket creep due to real income growth over time. Brackets would need to be widened by an index of income growth to offset both effects.

(Chart 13.) The Kennedy and Reagan rate cuts encouraged people to earn and report more income, especially where tax rates had been the highest and the disincentives had been the worst. Note that it is the percentage change in the **after-tax** return (1 less the marginal tax rate), not in the tax rate itself, that measures the change in incentives.

(**Chart 14**.) After the 1981 Reagan tax cut reduced tax rates evenly across the board, upper income people began reporting higher incomes and a rising share of taxable incomes, and paying a higher share of the total tax burden. The further marginal rate cuts in the 1986 Tax

CHART 12 Taxes And The Need For Indexing

No Tax Indexing	Year 1, P=100		Year 2, P=200, income doubles with inflation, no tax indexing		Year 2 in year 1 real dollars, no indexing	
 Initial tax schedule: \$0-\$10,000: 0% (exempt amount) \$10,000-\$30,000: 20% of amount over \$10,000 \$30,000-plus: \$4,000 plus 40% of amount over \$30,000 	Income year 1: Tax year 1: Average rate: Marginal rate:	\$20,000 \$2,000 10% 20%	Income year 2: Tax year 2: Average rate: Marginal rate:	\$40,000 \$8,000 20% 40%	Income year 2: Tax year 2: \$4, Average rate: 2 Marginal rate: 4	\$20,000)00 0% 0%
Tax Indexing	Year 1, P=100		Year 2, P=200, income doubles with inflation, with tax indexing		Year 2 in year 1 real dollars, with indexing	
 Initial tax schedule (above) for year 1; Indexed tax schedule for year 2: \$0-\$20,000: 0% (exempt amount) \$20,000-\$60,000: 20% of amount over \$20,000 \$60,000-plus: \$8,000 plus 40% of amount over \$60,000 	Income year 1: Tax year 1: Average rate: Marginal rate:	\$20,000 \$2,000 10% 20%	Income year 2: Tax year 2: Average rate: Marginal rate:	\$40,000 \$4,000 10% 20%	Income year 2: Tax year 2: Average rate: Marginal rate:	\$20,000 \$2,000 10% 20%

The	Kennedy rate cuts were roughly the same percentage rate reduction
acro	oss the board, but rewards rose most where rates were highest:
	≻Top tax rate cut from 91% to 70%.
	After-tax reward rose from 9% to 30%, up 230%.
	Bottom tax rate cut from 20% to 14%.
	After-tax reward rose from 80% to 86%, up 7.5%.
Sim	ilarly for the Reagan Tax cuts:
	➤Top tax rate cut from 70% to 50%.
	After-tax reward rose from 30% to 50%, up 67%.
	Bottom tax rate cut from 14% to 11%.
	After-tax reward rose from 86% to 89%, up 3.5%.

Chart 14a Individual Income Tax Shares By AGI Percentiles

Total Income Tax Shares (percentage)										
Year	Top 1%	99% - 95%	95% - 90%	90% - 75%	75% - 50%	Bottom 50%				
1981	17.9%	17.5%	12.9%	24.2%	20.2%	7.4%				
1985	22.3%	17.0%	12.6%	22.4%	18.6%	7.1%				
1989	25.2%	18.7%	11.8%	21.4%	16.9%	5.8%				
1993	29.0%	18.3%	11.9%	20.0%	15.9%	4.8%				
1997	33.2%	18.7%	11.3%	18.5%	14.0%	4.3%				
2000	37.4%	19.0%	10.9%	16.7%	12.1%	3.9%				
2001	33.9%	19.4%	11.6%	18.0%	13.1%	4.0%				
2003	34.3%	20.1%	11.5%	18.0%	12.7%	3.5%				
2006	39.9%	20.3%	10.7%	15.5%	10.7%	3.0%				
	Average Tax Rate (percentage)									
Year	Top 1%	99% - 95%	95% - 90%	90% - 75%	75% - 50%	Bottom 50%				
1981	34.2%	22.2%	18.2%	15.5%	12.5%	6.6%				
1985	30.9%	18.7%	15.8%	12.9%	10.4%	5.7%				
1989	23.3%	18.0%	13.9%	12.1%	9.8%	5.1%				
1993	28.0%	17.5%	14.0%	11.4%	9.4%	4.3%				
1997	27.6%	18.8%	14.9%	12.0%	9.6%	4.5%				
2000	27.4%	20.1%	15.5%	12.0%	9.3%	4.6%				
2001	27.5%	19.1%	14.9%	11.6%	8.9%	4.1%				
2003	24.3%	16.6%	12.2%	9.5%	7.1%	2.9%				
2006	22.8%	17.5%	12.6%	9.4%	7.0%	3.0%				
	A	djusted Gros	s Income Sha	re (percentaç	je)					
Year	Top 1%	99% - 95%	95% - 90%	90% - 75%	75% - 50%	Bottom 50%				
1981	8.3%	12.5%	11.2%	24.7%	25.6%	17.7%				
1985	10.0%	12.6%	11.1%	24.2%	24.8%	17.3%				
1989	14.2%	13.7%	11.2%	23.3%	22.8%	15.0%				
1993	13.8%	14.0%	11.3%	23.4%	22.6%	14.9%				
1997	17.4%	14.4%	11.0%	22.2%	21.1%	13.8%				
2000	20.8%	14.5%	10.7%	21.1%	19.9%	13.0%				
2001	17.5%	14.5%	11.1%	22.1%	21.0%	13.8%				
2003	16.8%	14.4%	11.2%	22.5%	21.1%	14.0%				
2006	22.1%	14.6%	10.7%	20.8%	19.3%	12.5%				
Sources: IRS, Statistics of Income Division, July 2008, at http://www.irs.gov/pub/irs-soi/06in01etr.xls; and U.S. Treasury for 1981 and 1985.										



Chart 14b While Marginal Tax Rates Have Fallen, High Earners' Income Tax Shares Have Risen

Reform Act reinforced this trend. There was a slowdown in the rapid rise of the share of taxable income in the top income percentile after the tax rate increases in the 1990 and 1993 Tax Acts, through about 1995, although the higher tax rates pushed up total tax collections from these taxpayers. The trend toward higher reported incomes at the top resumed later in the decade, due in part to capital gains and stock options that became increasingly important over the period. The collapse of the stock market bubble in 2000 temporarily reduced the share of taxes paid by those in the top income percentile, but it is now rising again. The record suggests that income is sensitive to tax rates. (Some of the most recent increase for the top 1% was due to rising incomes in the financial industry, and to strong realizations of capital gains. Both are certainly down following the collapse of the financial and housing markets!)

(Chart 15.) The statutory marginal tax rates don't tell the whole story. Tax rates can be much higher than they appear. If the tax system hits the same income more than once, or if tax rules overstate actual income, then the effective marginal tax rate may be much higher than the apparent statutory tax rate. It is just as important, or even more important, to set the correct tax base as to have low tax rates.

Some income is taxed more than once. The payroll tax adds 15.3% to the tax rate on labor compensation. The corporate income tax hits shareholder income twice. In some cases, earning an extra dollar of income causes one's taxable income to go up by more than \$1 because



a tax credit or exemption one is receiving is "phased-out" as income rises. And sometimes the tax rules mismeasure (overstate) a taxpayer's actual income to inflate Treasury revenue. All these cases result in a higher effective marginal tax rate.

(**Chart 16**.) There are many examples of phase-outs, and more are added with each new piece of tax legislation. The complexity is astonishing and frustrating to taxpayers. For example, upper income taxpayers must phase out their personal exemptions and part of their itemized deductions as their income exceeds certain thresholds. The phase-out raises the top tax rates by about 2.5 to 5 percentage points for a couple, depending on the number of their dependents. The top marginal income tax rate is effectively pushed into the low forties. (Charts 16 and 17 are based on numbers computed earlier this decade. If the charts were redrawn using 2007 tax parameters, the specific numbers would change but the general patterns – sharp spikes in marginal tax rates due to phase-outs – would remain the same.)

(**Chart 17**.) The Earned Income Tax Credit (EITC) is a negative income tax at a 40% rate as it is being phased-in between \$0 and roughly \$10,000 of income. After paying the 7.65% payroll tax, low income workers face a net negative marginal tax rate of 32.35% (for families with two children). The EITC is phased out at about a 21% rate (for families with two children) between roughly \$13,000 and \$32,000 of income. As each dollar of added income reduces the EITC by \$0.21, the phase-out imposes high implicit marginal tax rates on people who must still



Chart 16 AGI Ranges Of Phase-Outs And Potential Marginal Tax Rate Increases, Couple

be considered as having low income. The 2001 Tax Act made the child credit refundable. The refundable child credit provides a 15% negative tax on income from \$10,000 to about \$23,000, which offsets the income tax entirely in that range. Working parents with two dependent children and income between roughly \$23,000 and \$32,000 face marginal tax rates of nearly 42% to 47% due to the combined effect of the income and payroll tax rates and the rate of loss of the EITC. In brief, below \$13,000, earners can face negative tax rates as the EITC and the refundable child credit phase in. These credits reduce the marginal and average tax rates on low income earners, but as incomes rise the subsequent EITC phase-out increases marginal tax rates and discourages workers from getting training and taking better jobs or working longer hours.

(Chart 18.) Social Security recipients face high marginal tax rates. Phasing in \$0.50 or \$0.85 in benefits to taxable income as a beneficiary's interest, dividends, and pension income exceeds certain statutory thresholds by an extra dollar effectively raises tax rates on those other sources of income. Prior to the 2001 Tax Act, marginal tax rates on investment income could reach 42% or nearly 52% for Social Security beneficiaries, and may still reach 37.5% or 46.3% when the 2001 Act is fully phased in. Prior to the recent income tax rate cuts, the marginal federal income tax rate on wages of beneficiaries could exceed 62%; the 2001 Act will lower that to about 57%. Also before the recent tax cuts, wage income subject to the Social Security



Cumulative Marginal Tax Rate For A Single Chart 17

Chart 18 Effective Federal* Marginal Tax Rates for Social Security Recipients

	Marginal tax rates as Social Security benefits become taxable, in tier 1 (50% phase- in range) or tier 2 (85% phase-in range)						
Statutory Income		Income from sav	/ings, pensions **				
Tax Rate	Tier 1 (150% of statute	ory income tax rate)	Tier 2 (185% of statute	ory income tax rate)			
10% (Current Law)	15%	%	NA	١			
15%	22.5	%	27.8	%			
25% (Current Law)	NA		46.3	%			
28% (Pre-2001 Law)	NA		51.8%				
	Wage Income ***						
Statutory Income	If not subject to	earnings test	Subject to earnings test if between ages 62 and "normal retirement age"				
Tax Rate	Tier 1	Tier 2	Tier 1	Tier 2			
10% (Current Law)	28.1%	NA	74.3%	NA			
15%	35.0%	39.9%	79.4%	83.0%			
25% (Current Law)	NA	57.1%	NA	95.5%			
28% (Pre-2001 Law)	NA	62.3%	NA	99.3%			
Add 4 to 8 percentage points for typical state income tax rates for states that follow federal taxation of benefits. Tax-exempt bond income is included in determining whether income is over the threshold for taxing benefits. An additional dollar adds \$0.50 or \$0.85 to							

Assumes self-employed payroll tax, and allows for deduction of "employer's" half of payroll tax from AGI and effect of deduction on modified adjusted gross ncome used to determine amount of Social Security benefits subject to income taxation. Figures would be very similar for employee beneficiaries after adding e employee and employer payroll tax rate adjusted for income tax deduction of employer's half at employer's income tax rate



earnings test could face combined federal tax rates and loss of benefits equal to 106% of the added income, even before state income taxes; the 2001 Act will reduce that maximum federal take to about 102%.

(Chart 19.) Phase-ins are bad, but so is taxing the same income more than once. Income that is saved is taxed more heavily than income that is used for consumption. The income tax raises the cost of saving by more than the cost of consuming, and tilts behavior away from saving. There are at least four layers of possible tax on income that is saved.

- 1) Income is taxed when first earned. If you use the after-tax income to buy food, clothing, or a television, you can generally eat, stay warm, and enjoy the entertainment with no additional federal tax (except for a few federal excise taxes).
- 2) But if you buy a bond or stock or invest in a small business with that after-tax income there is another layer of personal income tax on the stream of interest, dividends, profits or capital gains received on the saving (which is a tax on the "enjoyment" that you "buy" when you save). This is the basic income tax bias against saving.
- 3) If the saving is in corporate stock, there is also the corporate tax to be paid before any distribution to the shareholder, or any reinvestment of retained after-tax earnings to

increase the value of the business. (Whether the after-tax corporate income is paid as a dividend, or reinvested to raise the value of the business and create a capital gain, corporate income is taxed twice.)

• 4) If a modest amount is left at death, it is taxed again by the estate and gift tax.

(**Chart 20a**.) The basic tax bias (the second layer of tax) against saving can be offset by deferring tax on *all* saving and taxing it on withdrawal, as is allowed for limited amounts contributed to a deductible IRA or pension plan. It can also be offset by taxing the money before it is saved, but not taxing the return, as in a Roth IRA. Either method puts the saving on an even par with consumption; the resulting tax raises the cost of consumption and saving equally.

The chart shows the effect of a hypothetical 20% income tax on saving and consumption at a 4% interest rate. Without the tax, one could consume \$100 or buy a bond and earn interest of \$4 a year. With the tax, one must earn \$125 to have \$100 left after tax for consumption, a jump of 25% in the cost of consumption. To earn the same \$4 in interest, however, one must earn \$156.25, pay \$31.25 in tax, buy a \$125 bond, earn \$5 in interest, pay \$1 in tax on the interest, and have \$4 left after all taxes. The cost of the saving has gone up 56.25% because of the taxation of the saving and the return. Either allowing deferral of income saved or exempting the return from tax would restore the no-tax relationship between saving and consuming.

Equivalence of the two methods of neutral treatment of saving. (Chart 20b.) The two methods of providing neutral treatment of saving are equivalent in their results (if savers face the same tax rate over time). Using another example, suppose that interest rates are 7.2 percent. At that rate of interest, \$1 saved would grow, with interest, to \$2 in ten years. (Alternatively, suppose that reinvested earnings caused the price of a share of stock to double in ten years, and that the stock is sold and the capital gain is realized at that time.) Suppose also that the income tax rate is 20%.

Under the saving-deductible method, an individual could earn \$100, save it without paying tax up front on the deposit or on the annual interest build-up (or on the stock purchase and accruing gain), and withdraw \$200 ten years later. After paying a 20% tax on the withdrawal (or the proceeds of the stock sale), the saver would have \$160 to spend.

Under the returns-exempt method, an individual could earn \$100, pay a 20% tax, and save the remaining \$80. Without owing any further tax on the returns, he could withdraw \$160 ten years later, and, here too, would have \$160 to spend.

Either neutral method is better than current law. Under the current tax system, an individual earning \$100 would have to pay a 20% tax, save \$80, and owe tax annually on the

Pre-tax income needed to have either (a) \$100 for consumption after taxes or (b) a \$100 bond paying \$4 in interest after taxes.								
Ordinary	Ordinary Income Tax Treatment, IRA-type Treatment, or Tax Exempt Bond Treatment.							
		Pre-tax income	Тах	After-tax income	Interest on saving	Tax on interest	After- tax interest	% increase in cost of activity due to tax
No income tax exists	Income consumed	\$100	\$0	\$100				
	Income saved	\$100	\$0	\$100	\$4	\$0	\$4	
Ordinary income tax	Income consumed	\$125	\$25	\$100				25%
levied at 20% rate	Income saved	\$156.25	\$31.25	\$125	\$5	\$1	\$4	56.25%
IRA-type treatment: amounts saved tax deductible, returns on saving taxed		\$125	\$0	\$125	\$5	\$1	\$4	25%
Tax-exempt bond treatment: no deduction of saving, returns not taxed		\$125	\$25	\$100	\$4	\$0	\$4	25%
The 20% income tax, by taxing income when first earned and taxing the return on saving, raises the cost of consumption by 25% and the cost of obtaining additional future income by 56.25%, more than twice the increase in the cost of consumption.								

Chart 20a Income Tax Bias Against Saving and Two Cures

Under IRA or tax exempt bond treatment, the tax raises the cost of obtaining additional future income by 25%, the same penalty as on consumption.

Chart 20b Equivalence Of Saving Deferred And Returns Exempt Tax On Saving; Contrast With Ordinary Income Tax (Illustration assumes 7.2% pre-tax interest rate, 20% tax rate, and 10-year investment)

Tax Treatment	Saving Deferred	Returns Exempt	Ordinary Income Tax	
Pretax earnings to be saved	\$100	\$100	\$100	
Tax on saving	0	20	20	
Amount saved	100	80	80	
Is interest on inside build-up taxed?	No, 7.2% reinvested	No, 7.2% reinvested	Yes, 5.76% reinvested	
Account after 10 years	200	160	140	
Tax due on withdrawal	40	0	0	
After-tax spendable balance	160	160	140	
Cost to saver of ordinary tax treatment			20 (= 160 - 140) (a third of the interest)	

interest, reducing the 7.2% percent interest rate to an after-tax rate of 5.76%. With less interest left to build up after taxes, the saver would have only \$140 to withdraw and spend after ten years. The \$20 difference (\$160-\$140) between current law and the neutral systems (about a third of the interest over 10 years) is a measure of the double taxation imposed by current law on income that is saved. Alternatively, note that the same \$140 balance would have been achieved by putting a neutral tax of 30% on the original saving (instead of the assumed 20%), leaving \$70 to double to \$140 over ten years. Clearly, ordinary income taxation imposes a substantially higher tax penalty on income saved than on income used for consumption.

<u>Treatment of capital gains.</u> As the example above shows, the two methods produce the same after-tax returns on all income from saving, including capital gains. In fact, under either the saving-deferred or returns-exempt approach to ending the tax bias, capital gains would cease to be a tax issue, greatly simplifying tax forms for individual and business taxpayers and reducing disputes with the IRS. Under the returns-exempt approach, there would obviously be no tax on capital gains, because no returns on saving would be taxable. In the saving-deferred case, the purchase of the assets would be expensed (resulting in a zero basis for tax purposes), and all the proceeds of asset sales would be properly included in taxable income. Any gain or loss

embedded in the numbers would be automatically calculated correctly for tax purposes without any special computations required. If the proceeds of asset sales were reinvested, any embedded gains could be rolled over, and would remain tax deferred until withdrawn for consumption.

(Chart 21.) The basic double taxation of saving matters a lot. Neutral (tax-deferred) treatment of saving over a working lifetime could boost retirement income by two-thirds.

(Chart 22.) Full neutrality would require ending the additional on corporate income. tax Dividends are taxed a second time the shareholders' ordinary at income tax rates after the corporation has already paid tax on

Chart 21 Advantage Of Tax Deferred Saving Over Ordinary (Biased) Tax Treatment: Build-up Of \$1,000 Saved per Year





	(a) Retained Earnings, Pre-2003 Act	(b) Dividend Payout, Pre-2001 Act	(c) Retained Earnings and Dividends, 2003 Act					
1) Corporate Income	\$1.00	\$1.00	\$1.00					
2) Corporate tax at top rate	\$0.35	\$0.35	\$0.35					
 3) After-tax corporate income: Either retained, raising stock price (columns (a), (c)), or paid as dividend (col. (b), (c)) 	\$0.65	\$0.65	\$0.65					
4) Individual income tax at top rate (dividends as ordinary income, retained earnings as capital gain)*	\$0.13 (tax rate 20%)	\$0.2574 (tax rate 39.6%)	\$0.0975 (tax rate 15%)					
5) Total tax	\$0.48	\$0.6074	\$0.4475					
6) Total tax rate	48%	60.74%	44.75%					
7) Income left to shareholder	\$0.52	\$0.3926	\$0.5525					
* Top corporate rate excludes corporate surtaxes, and top individual rate ignores phase-outs of exemptions and deductions and taxation of Social Security, which may push effective top tax rates higher than statutory rates. Retained earnings are assumed to trigger a long-term capital gains with a maximum rate of 20% or 15%. Short term capits are taxed at ordinary tax rates.								

Chart 22

Multiple Taxation of Corporate Income

Chart 23 Present Value of Current Law Capital Consumption Allowances per Dollar of Investment Compared to Expensing (First-Year Write-Off)

Asset lives:		3 Yrs	5 yrs	7 yrs	10 yrs	15 yrs	20 yrs	27.5 yrs	39 yrs
Present value of first- year write-off of \$1 of investment:		\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00
Present value of	0%	\$0.96	\$0.94	\$0.91	\$0.88	\$0.80	\$0.74	\$0.65	\$0.55
current law write-off of \$1	3%	\$0.94	\$0.89	\$0.85	\$0.79	\$0.67	\$0.59	\$0.47	\$0.37
rate is:	5%	\$0.92	\$0.86	\$0.81	\$0.74	\$0.60	\$0.52	\$0.39	\$0.30
Assumes a 3.5 percent real discount rate, 3-20 year assets placed in service in first quarter of the year, 27.5 - 39 year assets placed in service in January.									

the income. Retained after-tax corporate earnings boost the share price, triggering a capital gains tax when the shares are sold, at a top rate of 20% if the gains are long term. At 2000 tax rates, the combined top corporate and individual tax rates on reinvested earnings and dividend payouts were, respectively, 48% and almost 61% (higher, if a company gets dividends from another before passing them on to the shareholders). The 2001 Tax Act would have lowered the top individual tax rate to 35% and the combined top tax rates on dividends to just under 58%. The 2003 Tax Act lowered the tax on qualified dividends (dividends on corporate income subject to the corporate tax) and long term capital gains to a uniform 15 percent, equalizing the treatment of dividend and retained earnings, and partially reducing the tax bias against corporate business. The combined tax rate on dividends and capital gains is now just under 45%. The 15% dividend and capital gains rate will expire in 2011 unless renewed by Congress.

(Chart 23.) Not only is corporate income taxed twice, but the income of all businesses is overstated and overtaxed by forcing businesses to wait for years or decades to record the cost of their capital outlays. The deferred write-offs lose the time value of money and lose value to inflation during the period of the delay. Business capital outlays should be written off at once (expensed), not depreciated. Depreciation is an interest-free loan to the government. A dollar spent on a seven-year asset gets a write-off that is only worth \$0.91 cents in present value if inflation is zero. A dollar spent on a buildings (written-off over 39 years) gets a deduction worth just \$0.55 cents in present value. The cost of the delay rises with inflation. At 5% inflation, the

Expensing (Full Cost	Recovery)	Depreciation		
Revenues from machine, present value	\$115	Revenues from machine, present value	\$115	
Full cost of machine	\$100	Full cost of machine	\$100	
Full cost write-off for tax purposes (expensing)	\$100	Allowable depreciation write-off, present value	\$85	
Real profit = Taxable profit	\$15	Taxable "profit" (exceeds real profit)	\$30	
Тах	\$5	Тах	\$10	
After-tax income	\$10	After-tax income	\$5	
Rate of return	10%	Rate of return	5%	

Chart 24 Expensing Versus Depreciation: Depreciation Overstates Taxable Income and Depresses Return on Capital

Chart 25 Marginal Tax Rate Schedule Of Federal Estate And Gift Tax

If Taxable Estate/Gift is:			The Marginal
Over: But not over:		Tax Rate is:	
\$	0	\$10,000	18%*
10,0	00	20,000	20%*
20,0	00	40,000	22%*
40,0	00	60,000	24%*
60,0	00	80,000	26%*
80,0	00	100,000	28%*
100,0	00	150,000	30%*
150,0	00	250,000	32%*
250,0	00	500,000	34%*
500,0	00	750,000	37%*
750,0	00	1,000,000	39%
1,000,0	00	1,250,000	41%
1,250,0	00	1,500,000	43%
1,500,0	00	2,000,000	45%
2,000,0	00	2,500,000	49%
2,500,0	00	3,000,000	53%
3,000,0	00	10,000,000	55%
10,000,0	00	17,184,000	60%
Over 1	17,18	34,000	55%
* A Credit offsets the tax on the first \$675,000 of lifetime transfers in 2001, effectively making the tax rate zero on transfers below \$675.000.			

5					
	Estate Tax		Gift Tax		
Year	Top Tax Rate	Lifetime Amount Exempted by Credit	Top Tax Rate	Lifetime Amount Exempted by Credit	
2001	60%	675,000	60%	675,000	
2002	50%	1,000,000	50%	1,000,000	
2003	49%	1,000,000	49%	1,000,000	
2004	48%	1,500,000	48%	1,000,000	
2005	47%	1,500,000	47%	1,000,000	
2006	46%	2,000,000	46%	1,000,000	
2007	45%	2,000,000	45%	1,000,000	
2008	45%	2,000,000	45%	1,000,000	
2009	45%	3,500,000	45%	1,000,000	
2010	Estate Tax Repealed† 35%* 1,000,00			1,000,000	
2011 Old Estate and Gift Tax Returns‡					
Estate Tax Credit reduced by amt of Credit used against Gift Tax. *Gift tax only † Estate Tax repealed but bequests may be subject to capital gains tax. ‡ 2001 Tax Act disappears at end of 2010, unless extended or					
made permanent.					

Changes in Future Years

seven-year asset's write-off is worth only \$0.81, and the building's write-off drops in value to \$0.30. The 2002 and 2003 Tax Acts allowed businesses to expense 30 percent and 50 percent respectively, of the cost of equipment purchased during a four year window after 9/11/01. For 3 to 20 year assets, the provisions eliminated about 30 percent or 50 percent of the understatement of costs. However, the relief was temporary. The 50 percent expensing allowance was reinstated in 2008 to spur the weak economy. Unless the provision is extended, the replacement of any additional investment down the road will face a higher tax threshold.

(Chart 24.) At modest rates of inflation, the overstatement of business income by depreciation (instead of expensing) can cut the rate of return on business investment in half.

(Chart 25.) The transfer tax (estate and gift tax) must be eliminated to have a neutral tax system. Every cent saved to create an estate has either been taxed already when the decedent (and the companies she or he may have owned shares in) paid income taxes, or, if the saving is in a tax-deferred retirement plan, it will be subject to the heir's income tax. The estate tax is always an extra layer of tax.



Chart 26 Marginal Tax Rates On Estates And

* 45% Estate Tax Rate becomes effective in 2007. Assumes married couple in 33% tax bracket, who are self-employed, with a 6% state income tax. Computed prior to Estate Tax Repeal, which is now scheduled for 2010.

Prior to the 2001 Tax Act, the estate tax had a top rate of 60% (55% plus a 5% surtax). The bottom marginal tax rates were offset by a credit (exempting the first \$625,000 of an estate in 2001), but once the estate reached taxable levels, the tax rates started at 37%. The 2001 Tax Act provided for a gradual lowering of the tax's top rate, an increase in the credit, and the elimination of the 5% surtax. In 2007, the top marginal rate is 45%, and the amount of estate exempted from the estate tax is \$2 million (but the exemption for the gift tax is only \$1 million). The estate tax (but not the gift tax portion) will vanish in 2010, but it will reappear in 2011 at the old, extremely high rates – as the 2001 Tax Act sunsets.

(Chart 26.) Because money left in an estate has generally been subject to income, payroll, and other taxes, the cumulative tax rate on that money is even higher than the estate tax rate. In 2009, the estate tax rate tops out at 45% if a parent leaves money to a child but can reach 70% if the bequest skips a generation to a grandchild or to other relatives more than one generation removed from the decedent. If someone were thinking of working an extra year just to add to an estate, the combined income, payroll, estate, and generation skipping taxes could hit 85% – which is a very strong disincentive to continued work and saving.

Why tax reform?

The current tax system distorts economic activity, depresses total income and employment, hides the cost of government from the taxpayer/voters, is complex, expensive to comply with, and is hard to enforce, is subject to abuse by taxpayers and the IRS, and is widely viewed as unfair (although definitions of fairness and the accuracy of perceptions about the distribution of the tax burden in the current system vary widely).

Tax reform is not about slick packaging, eliminating individual tax filing or making it painless, eliminating millions from the tax rolls, getting the return onto a postcard, eliminating deductions, eliminating the IRS, or eliminating competition from foreign companies or countries.

Tax reform is about raising revenue in a manner that does less damage to the economy than current law, and that better informs the public what it is paying for government so that voters can make informed decisions about how much government activity they wish to support.

Tax reform should be approached with four criteria in mind:

- Neutrality, to minimize economic distortions and reduce output as little as possible;
- Visibility, to show the taxpayer/voters the price of government services;
- **Fairness**, to shelter the poorest citizens, but otherwise to treat everyone equally before the law, avoiding discrimination against one or another producer and recognizing property rights;
- **Simplicity**, starting with a clear concept leading to rules that are unambiguous, readily understandable, unlikely to lead to disputes between taxpayers and the IRS, and that are easy and inexpensive to comply with and enforce; a system based on a clear rationale that the public and policy makers regard as correct and to which they will stick.

Comparison of neutral tax systems

There are two basic categories of saving/consumption neutral tax systems: the saving-deferred approach and the returns-exempt approach. As discussed earlier, in a saving-deferred system, saving is deducted from current taxable income, and the principal and any returns are taxable on withdrawal for consumption, as in a regular IRA or other tax-deferred pension arrangement. In the returns-exempt tax, income is taxed before it is saved, and any subsequent earnings on the saving are tax exempt, as in a Roth IRA or tax exempt bond. A neutral system must tax either income that is saved or the returns on the saving, but not both. As shown above, the two approaches are equivalent in terms of the tax imposed over the lifetime of the saving.

These two approaches to neutrality are reflected in several generic types of neutral tax systems, such as a cash-flow tax, a retail sales taxes, and a value added tax (VAT). An individual cash-flow tax is collected from individuals based on their earnings less their saving, which equals their spending on consumption goods and services. A retail sales tax is collected by retailers based on the consumption spending of individuals, which is that part of their earnings not devoted to saving. Value added taxes are collected in increments throughout the production process by businesses based on sales less investment expenses; sales less investment equals national income less saving, which again equals the amount spent on consumption of final goods and services. In other words, these taxes all have the same fundamental tax base.

Some writers make artificial distinctions among saving/consumption neutral taxes, referring to them as consumption taxes if they are of the sales tax or VAT variety, and as saving-deferred or saving-exempt income taxes if they are of the cash flow type or "flat tax", as if to imply that they generate different incentives to save or consume. In fact, the point of collection of the taxes does not change their common nature; they are all saving/consumption neutral taxes on people's incomes (properly defined).

The nature of the neutral taxes.

The nature of consumption or consumption-based or consumed-income taxes must be clearly understood. They are not taxes on the act of consumption or on the goods and services consumed. Goods and services do not pay taxes. Only people pay taxes, and they pay them out of income. Remember the picture of the tax wedge. Sales and excise taxes and VATs either depress sales of the taxed products, reducing the factor incomes of the people who provide the labor and capital used to make them, or they reduce the purchasing power of that income when the workers and savers attempt to spend it as consumers.

The two neutral consumed-income style taxes are imposed on income as it is earned, but properly measured, recognizing that saving is a cost of earning future revenue. These taxes properly measure net income either by deferring the amount saved or excluding the earnings of the saving from tax. Excluding from total income the amount that is saved and used to finance investment leaves an amount equal in a given time period to total consumption. This does not convert the tax into a "tax on consumption", however; it is merely a means of avoiding multiple taxation of income used for saving, and the returns on the saving will be taxed when earned, unless reinvested in turn. It bears repeating that all taxes are paid out of income by people, not by businesses, and not by goods and services.

What major tax reform plans have in common.

Several saving/consumption neutral tax systems have been developed as specific legislative proposals for fundamental tax reform, including the Flat Tax, the USA Tax, and the

national retail sales tax. They all utilize some form, variation, or mix of the generic consumption/saving neutral tax systems. That is, they use either the saving-deferred or returns-exempt approach to the tax treatment of saving and investment. Except for a few idiosyncracies, they are all unbiased taxes on labor and capital income, properly measured, either when earned or when spent.

All of these reforms would lead to higher levels of investment, productivity, and income. Whatever direction fundamental tax restructuring may take, it is important to remember that all these neutral approaches have in common this great advantage over current law.

Furthermore, each has the potential, if designed properly, to accommodate a single low tax rate on income, and to eliminate the alternative minimum tax and the estate tax. The systems would have expensing instead of depreciation (or equivalent non-taxation of investment outlays), and no separate taxation of capital gains. Each can substantially reduce the confusing treatment of foreign source income that cripples American businesses operating abroad. Many of the major sources of complexity in the current tax code would be gone.

How major approaches to tax reform differ.

While sharing many advantages, some of these neutral tax systems do better than others when measured against the other important tax policy considerations: simplicity, visibility, fairness, and treating all taxpayers equally before the law. It is on the basis of these criteria that one must choose among the various neutral taxes.

<u>Saving-deferred income taxes.</u> The distinctive feature of a saving-deferred income tax (also called a cash flow tax or consumed-income tax) is that individuals would exclude their saving (including interest and principal payments) from taxable income; they would include the returns on their saving — interest, dividends, and sales of assets — plus borrowing in taxable income, but only if the returns were withdrawn for consumption, and not reinvested. There would be personal allowances and a tax rate structure that could be flat or graduated.

(Chart 27.) A simple neutral individual cash flow tax might arguably be considered the optimal tax system. An example is the Inflow-Outflow Tax expounded by the late Norman B. Ture at the Institute for Research on the Economics of Taxation. It is levied only on individuals, and is therefore the most visible tax system. In it, people would defer tax on saving and investment (including tuition invested in human capital), and deduct any income they transfer to others (as gifts or as taxes). Thus, charitable gifts, payroll taxes, and taxes paid to state and local governments would be deductible, and recipients of transfers would report the receipts as taxable income (if it exceeded exempt amounts). Withdrawals from saving and government support payments would be added to income. There would be an exempt amount to protect the poor, and, as illustrated, a single (flat) marginal tax rate on all other income, which would minimize

Chart 27 Inflow-Outflow Tax

For		
1.	Sum of: Labor compensation, Pension receipts, Taxable social security, Transfer payments (from W-2 forms)	\$33,000
2.	Net saving (+) or net withdrawals from saving (-) (from Schedule B)	\$ 3,000
3.	If line 2 is net saving (+), subtract the dollar amount from line 1; if line 2 is net withdrawal from saving (-), add the dollar amount to line 1.	\$30,000
4.	Other itemized deductions from Schedule A	\$10,000
5.	Subtract line 4 from line 3.	\$20,000
6.	Personal allowance times number of taxpayers and dependents: $\frac{5,000}{x_2} = $	\$10,000
7.	Subtract line 6 from line 5. This is your taxable income.	\$10,000
8.	Tax from table (or, line 7 times 20%).	\$ 2,000
9.	Amount withheld, from W-2, plus estimated tax payments.	\$ 2,100
10.	Amount due (+) or amount overpaid (-) (line 8 less line 9). If amount is due, pay Internal Revenue Service.	- \$ 100
11.	If overpaid, fill in: Amount to be refunded <u>\$100</u> ; or Amount to be applied to estimated tax	

Scl	Schedule A, Itemized Deductions			
1.	Sum of individual payroll tax (from W-2), state and local income tax withheld (from W-2) and estimated state and local tax less refunds from previous year, and local property taxes.	\$ 5,000		
2.	Gifts, contributions.	\$ 1,000		
3.	Qualified tuition, training expenses.	\$ 4,000		
4.	Total. Enter on Form 1040, line 4.	\$10,000		

Schedule B, Saving	
List net saving (+) or withdrawals (-) from financial institutions reported on 1099 forms.	
First National Bank	-\$ 1,000
Merrill Paine Schwab	\$ 4,000
Total (if greater than zero, this is net saving; if less than zero, this is a net withdrawal). Enter on Form 1040, line 2.	\$ 3,000

all other distortions of economic activity. Because the tax would allow deductions for gifts and for tuition and other investment in human capital, and because supplies and capital investment in one's business would be expensed, the I-O tax would fall on virtually the same tax base as a national retail sales tax. The I-O tax would have the advantage, however, of being highly visible to the taxpayer/voter, and would do a far better job of "costing out" government.

All labor income (including fringe benefits) and capital income would be taxed once and only once on individual tax returns. There would be no separate business tax. Businesses would, in effect, deduct their dividend payments as well as their interest payments, passing them on to shareholders and lenders for tax purposes. Any remaining capital earnings retained by the business for reinvestment would be tax deferred on behalf of the shareholders, and investment would be expensed. Because all taxable capital income would be reported on individual tax returns, businesses would not need to file tax returns, merely report their distributions on 1099 forms. Businesses would be treated like pension custodians; they could borrow and grow your money without any tax until you choose to take it out and pay your tax on it.

There would be no estate tax or separate tax on capital gains. The tax would be territorial; there would be no taxation of foreign source income, and no foreign tax credit; there would be no deduction for saving flowing abroad, and no tax on the returns. For simplicity, income used for domestic saving and investment would receive saving-deferred treatment, while income used for saving and investment abroad would receive returns-exempt treatment.

Because income would be taxed before it is spent, the tax would be evenly imposed, implicitly, on income spent on domestic and imported goods. If the states were to adopt a similar tax system, it would not matter to them whether the individual spent his or her money in-state, out-of-state, or over the Internet, clearing up another major source of controversy and complexity.

The Inflow-Outflow tax system is simple. It maximizes incentives and minimizes distortions. It shows people most clearly what they are paying for government so they don't get tricked by hidden taxation into voting for more government than they would really want. This feature of maximum visibility distinguishes the I-O tax from other neutral tax reform proposals.

The "USA Tax" (universal saving allowance tax) as originally proposed by former Senator Sam Nunn (D-GA) and Senator Pete Domenici (R-NM) had a saving-deferred or cash flow tax for individuals, with steeply graduated rates. Steep graduation treats individual producers differently according to their incomes, which distorts production activity. The USA tax used a variation of the VAT on businesses to collect a portion of the total tax take. This gave the appearance of taxing businesses (which reduces visibility). The business tax would have been explicitly border adjustable (excused on exports, levied on imports), which some businesses favor. <u>Returns-exempt income tax.</u> The best known example of a returns-exempt income tax is the single-rate individual income tax (the "Flat Tax") proposed by professors Robert Hall and Alvin Rabushka, and introduced in Congress by former House Majority Leader Dick Armey (R-TX) and Senator Richard Shelby (R-AL). In its pure form it would have only one tax rate applicable to income above a large exempt amount, with no other deductions permitted. Only labor and pension income would be taxed on individual tax returns. In general, individuals would not defer tax on their saving, but would not be taxed on the earnings of the saving. (In legislative variations of this proposal, contributions to pensions and other retirement plans would remain deductible, and the withdrawals taxable, as under current law.)

Under the Flat Tax, all income from capital would be taxed once and only once on business tax returns; so would fringe benefits. There would be no need for businesses, individuals, or the IRS to track the payments of capital income from businesses to taxpayers. These provisions hide some of the tax burden from savers and workers. The business tax returns would follow the saving-deferred method: businesses would expense investment outlays and other costs, and pay tax on all the returns. There would be no taxation of foreign source income, and no foreign tax credit.

The Flat Tax takes some short-cuts in the allocation of income among taxpayers. For simplicity and a lower tax rate, it taxes donors, not recipients of charitable contributions, disallows deductions for state and local taxes and payroll taxes to individuals and businesses, and disallows interest deductions (such as mortgage interest) while not taxing interest received. Loss of the interest deduction for mortgagees and businesses would be offset by elimination of the tax on interest received by lenders. Interest rates would be expected to fall to current after-tax levels, compensating borrowers for the loss of the deduction, and leaving lenders with the same after-tax return as under current law.

These steps make for a simpler individual tax form, but a more complicated business tax form, and lead to some mismeasurement of income. Furthermore, the system cannot deal well with financial institutions that are paid for their services by means of the spread between interest rates charged to borrowers and interest rates paid to depositors. It is difficult to deal with banks, S&Ls, brokerage houses, and other financial intermediaries in any tax system in which interest is not generally deductible by borrowers and taxable to lenders. This is true of the returnsexempt tax, sales taxes, or value added taxes. A separate tax, based on cash flow, would have to be used to properly measure the income of these businesses and collect the right amount of tax.

A variation on the Flat Tax introduced by Senator Arlan Specter (R-PA) would allow the retention of the charitable deduction and retention of the home mortgage interest deduction for borrowers. (Retention of the mortgage interest deduction for borrowers would have little revenue effect, because the lenders would be taxed on the interest as under current law.)

A new version of the USA Tax has been introduced by Representative Phil English (R-PA). It uses the returns-exempt method for the individual portion of the tax, while retaining a business level VAT. It makes one other significant change from the original; it incorporates a tax credit for the payroll tax for businesses and individuals, in effect directing the first dollars of the income tax to Social Security. This formulation has the attribute that, if the Social Security taxes were reduced, income taxes would rise by an equal amount, and if Social Security taxes were to rise, income taxes would fall by an equal amount. This would have the unfortunate result of precluding a payroll tax cut from benefitting taxpayers or expanding employment, and could discourage reform of the Social Security System. A deduction for the payroll tax would be better tax policy.

Sales tax or value added tax. Taxes imposed on the sales of goods and services, such as a retail sales tax, a manufacturers excise tax, or a VAT, allow individuals to defer tax on their saving until the saving is withdrawn for consumption. A VAT, and a national retail sales tax if it were to exclude investment goods from the sales tax base, would be neutral as between income used for saving and investment and income used for consumption.

A drawback to sales taxes and VATs is that they tend not to be noticed or are hidden in the cost of goods and services, making the cost of government less visible and making these taxes the easiest to raise. They are the easiest taxes for individuals to comply with — individuals are totally divorced from the collection process — but they may go too far in that regard. Sales taxes and VATs also pose some problems if one wishes to reduce their burden on low income taxpayers. Virtually the same tax base can be employed by a cash flow tax, such as the Inflow-Outflow tax described above, with greater transparency for the taxpayer/voters.

Sales taxes and VAT's have serious compliance cost for businesses, which could be made worse by the development of Internet commerce. Sellers generally only collect sales taxes for the jurisdiction in which they are located. The states are upset that they are losing sales tax revenue on purchases made by their residents out of state, and require "use taxes" on out of state items, which most citizens fail to pay. The states want businesses to collect taxes for all jurisdictions to which they ship retail products or provide services. However, there are 30,000 potential taxing jurisdictions in the United States. Compliance would be a nightmare. Jurisdictions have different sales tax rates and different definitions of what is or is not a taxable item, and cannot agree on where the electronic services provided over the Internet (which may involve parties in several states and nations) are produced or consumed. The danger of multiple taxation of the same income is serious. In the case of national sales taxes or VATs, businesses would face corresponding international compliance issues as they sell to or buy from many nations.

<u>Border-adjustments.</u> Sales taxes and VATs are generally imposed on imports and remitted or not levied on exports. This feature is called border adjustability, or being "destination-based". (These taxes may also be set up without border adjustability, in which case they are called "origin-based".) The border-adjustable form is more natural because sales taxes (and the final layer of the VAT) are collected at the point of final sale to consumers. With border adjustment, any purchase, whether domestic or foreign in origin, triggers the same tax at the cash register. Consumed-income taxes are naturally not border adjustable, because they are collected from individuals as they earn. Any income not saved is taxable, whether it was earned by producing for domestic sale or export, and whether it is to be spent on domestic products or imports.

These rules should be viewed as administrative conventions with limited consequences, not as something stemming from basic tax principles with earth-shattering ramifications. In particular, destination based taxes are generally and badly rationalized as "taxing the consumption where it occurs". But consumption-based taxes are not taxes on consumption per se. They are more properly viewed as being taxes on labor and capital income earned in producing goods and services. When thought of in that manner, it is not clear why a tax on the earnings of labor and capital employed in Country A should vary depending on whether their products are sold at home or in Country B.

The question of border adjustment should not be the determining consideration in choosing which of the neutral tax systems to adopt. Border adjustability is often cited as an advantage of a national sales tax or a VAT. Most economists, however, are skeptical that border adjustability would benefit the U.S. economy as a whole. It would not increase total U.S. output or employment. We might produce more for export and less for our own use, but we would then have to import more to satisfy our demand for consumption goods. Jobs gained in producing exports would be at the expense of jobs aimed at producing for domestic markets. Alternatively, the border tax on imports might keep them from increasing, which would block any increase in exports by preventing foreigners from earning dollars to obtain them. Put another way, natural exchange rate adjustments would offset the effect on the trade balance. The balance of payments would be largely unaffected either way.

Deficits, national saving, and interest rates

Opponents of fundamental tax reform would like to insist that any tax overhaul be revenue neutral, in the static sense, without allowing for any revenue reflows due to higher growth. It would be far easier to pass a good tax reform if a net tax reduction were possible, to avoid creating any losers during the transition. Fear of a tax cut may be an obstacle to improving the tax system.

One often hears calls for avoiding tax cuts to preserve a government budget surplus, or for raising taxes to reduce a government deficit, on the grounds that doing so would repay debt or reduce government borrowing, thereby raising national saving, reducing interest rates, and promoting growth. Reduction of government spending would certainly have these effects.



Chart 28 Government And Private Saving Often Move In Opposite Directions

Sources NIPA data from Bureau of Economic Analysis (accessed at www.bea.doc.gov); Chart based on Gary Robbins and Aldona Robbins, "Robbing Peter to Pay ... Uncle Sam," Economic Scorecard, 2nd Quarter, 1999, Institute for Policy Innovation, accessed at www.ipi.org.

However, eschewing a supply-enhancing tax cut or enacting an anti-supply tax increase would not.

(Chart 28.) The argument for higher taxes to reduce government borrowing and thereby reduce "crowding out" mistakenly assumes that private saving is unaffected by a tax increase. The evidence of recent decades is that lower federal tax receipts are generally offset, in large part, by higher private saving, and that major increases in tax revenue as a share of GDP are accompanied by decreases in private saving. This shows up quite clearly in Chart 28 in the nearly mirror image swings in government and personal saving prior to 1973 and since 1990. One reason for the increase in government revenue and decrease in personal saving in the 1998-2000 period was the sharp rise in capital gains taxes. Individuals not wanting to remove money from their stock portfolios paid the tax out of current income instead. That was recorded as a drop in the personal saving rate out of current income.

In fact, there are many types of tax increases that could reduce private saving by as much or more than the added tax revenue. There would then be less saving to finance investment than before. A tax increase that restricted capital consumption write-offs or raised business taxes in other ways would also discourage investment directly. Economic growth would slow, offsetting some or all of the gain in tax revenue from the tax rate increase. In addition, there is a strong tendency for governments to spend a tax increase, rather than use it to reduce deficits. For all these reasons, it is preferable to reduce deficits through spending reductions rather than through tax increases.

Virtually every element of the income tax system is biased against saving in favor of consumption. Payroll taxes favor leisure over work effort and the earning of market income. If a tax increase is to increase national saving, it must somehow reduce private saving by less that the increase in taxes (even assuming, of course that the added taxes are used to reduce the deficit instead of being spent). Neither economic analysis nor history support the claim that tax increases come out of consumption rather than saving.

The largest component of gross national saving is gross business saving, consisting of retained corporate earnings and business capital consumption allowances. The direct, immediate effect of any increase in business taxes is to reduce business saving dollar for dollar with the tax increase. In addition, it reduces the profitability of investment and reduces the desired capital stock. Any such tax increase raises the cost of capital, hence the cost of saving, and induces a reduction in the share of income that people commit to saving as opposed to current consumption. No increase in national saving and investment can be achieved through an increase in business taxes. Indeed, saving and investment would fall.

Much the same results would be expected from increases in individual income taxes. The bias against saving would worsen. Even the imposition of a neutral VAT cannot increase private saving but must worsen it by raising production costs and reducing income. Conversely, reductions in individual and business taxes, if done "at the margin" in a manner that encourages private saving and investment, would boost both relative to levels that would otherwise occur in spite of a decrease in the federal surplus or increase in the federal deficit.

There is a substantial economic literature that show that raising taxes has little if any positive effect on national saving. For example, see, "The Impact of Government Deficits on Personal and National Saving Rates," by Michael Darby, Robert Gillingham, and John Greenlees of the Office of Economic Policy, U.S. Treasury Department. They found that, at least for the first several years, any increase in taxes is largely offset by a reduction in private saving.

These conclusions about the adverse effects of taxation on saving are supported by common sense. A substantial portion of a household's expenditures are highly inflexible. One cannot quickly reduce rent or mortgage payments. Food must be bought and tuition and medical bills paid. If a tax increase reduces discretionary income, the first area to be cut back is saving. If, in addition, the tax increase is of a type that reduces the incentive to save out of any given amount, there is further reason to reduce saving.

Because of the adverse effect on private saving, tax increases will not raise national saving or reduce "crowding out" by government. Real crowding out is the absorption of real

resources by the government. No matter how it is financed, government spending reduces the incentive to produce output in the private sector. Only by curtailing government outlays can the real "crowding out" be diminished.

As for the effect of federal deficits and debt on interest rates, the economic literature reveals little to none. See "The Effect of Deficits on Prices of Financial Assets, Theory and Evidence," by Manuel Johnson, Jacob Dreyer, Ronald Hoffman, and James Girola, Office of Economic Policy, U.S. Treasury Department, March, 1984. The world's stock of financial instruments (stocks, bonds, notes, bills, mortgages, commercial paper, etc.) is rapidly approaching \$100 trillion, and will double in real terms in a generation. The presence or absence of an additional trillion dollars of U.S. government debt would scarcely affect asset prices or world interest rates. Even if a slower-than-forecast paydown of the U.S. national debt were to occur, the delay would raise interest rates by at most a few basis points (e.g. from 5% to 5.05%). The effect on investment would be very small. If the slowdown in debt repayment were due to a switch to a more pro-saving, pro-investment tax code, the favorable effect of enhanced investment incentives would dwarf any interest rate effect, and investment would increase significantly.

Growth and job creation

Fundamental tax reform would provide a significant boost to the economy and to personal incomes. Any of the saving/consumption neutral tax systems would be far more conducive to growth than current law. They would allow the economy to gain, over about a decade, the investment and growth that the current biased tax system has suppressed. They would add about 10 percent to the GDP, or about \$4,000 to \$6,000 in average family income. They take different approaches to eliminating the biases in current law. They have different transition problems, but none of these are unsolvable.

The potential for faster growth of jobs and incomes should allay concerns that tax reform might force a choice between higher short term budget deficits and tax increases for some taxpayers. In particular, when we look at how tax reform affects a family or individual worker or taxpayer, it is not enough to apply the new tax code to last year's income because neither the economy nor the taxpayer will behave the same way after tax reform as before. As saving and investment increase, productivity and the taxpayer's income will grow faster for a decade or more and be higher by increasing amounts over time. The taxpayer will enjoy lower interest rates on mortgages and student loans as the tax burden on saving is reduced. Although reduced taxes on saving may not instantly lower the tax of a twenty-year-old who has not yet begun to save, it will lower taxes on that worker as he or she accumulates assets over a working lifetime, and leave that worker many tens of thousands or even hundreds of thousands of dollars better off by age 65, and far more secure in retirement. Whatever happens the first year, people will enjoy a lifetime of benefits from a pro-grow tax reform, and it is the lifetime benefit that matter. As for the federal budget, there are many benefits, short term and long term. People would immediately have less incentive to shelter their existing income from tax, and the Treasury would see some revenue offset to any net tax reduction even before any rise in economic activity and income. In addition, of course, national income would grow faster, right from the start. An extra point on the growth rate would add a cumulative extra half trillion dollars to federal revenues over seven years. There would also be gains on the spending side of the budget. More people working, and working at higher paying jobs, would men a natural reduction in claims for income support payments. In light of the great benefits of reform to the economy, the population, and the budget, it would be wise to forge ahead, regardless of the transitory budget consequences. If the transitory costs to the Treasury are of real concern to lawmakers, they can best be addressed by restraining the growth of federal spending to accommodate the tax reform.