Executive Summary

Tax policy over the last 40 years has been inconsistent, often irrational, and frequently counterproductive. Almost every year since 1954 has seen the passage of some type of tax legislation, as lawmakers have used taxes to stimulate the economy and to slow it down, to fight wars, inflation and poverty, and to redistribute income and achieve "fairness."

Taxes have taken an increasing bite out of the average American's income and the U.S. economy over the last four decades

Despite the many changes, one trend is clear: Taxes have taken an increasing bite out of the average American's income and the U.S. economy over the last four decades:

- Per capita, Americans paid $7,554 in taxes in 1993, or 34.5 percent of their income, up from $3,073 (in 1993 dollars), or 26.6 percent of their income, in 1954.
- As a percent of the nation's Gross Domestic Product (GDP), taxes increased from 24.1 percent of GDP in 1954 to 30.6 percent of GDP in 1993.

Recent tax policy bears considerable responsibility for the 1990-91 recession and the significant downward shift in long-run U.S. economic growth prospects since the late 1980s. While the economy has been expanding since the latest recession ended in March of 1991, it is growing much slower than the 3.2 percent it averaged from 1946 until 1988, and substantially slower than the 5 percent averaged from 1983 to 1988.

Slower than normal growth since 1989 has already robbed Americans of higher living standards, the economy of additional output, and government of billions of dollars in lost revenues. The losses will be even more dramatic if the trend continues:

- Measured in today's dollars, real GDP is $1.3 trillion below what it would have been if the growth trend of the 1980s had been maintained.
- As a result, the average American is $5,200 worse off since 1989 and could lose another $10,000 during the rest of the decade.
- The federal government has lost some $200 billion in revenue since 1989 and could lose another $600 billion if this trend continues until the end of the decade.

Measured in today's dollars, real GDP is $1.3 trillion below what it would have been if the growth trend of the 1980s had been maintained.

Much of the problem with tax policy since 1954 has been its focus on who is writing the check, as opposed to what activity is being taxed. Capital and labor—the key components of economic growth—are being taxed at near historic highs with devastating implications:

- The average tax rate on business capital today is 54.4 percent, up from 49.2 percent in 1954, and the marginal tax rate is 65.8 percent, up from 53.6 percent in 1954.
- The average tax on labor today is 31.2 percent, up from 20.1 percent in 1954, and the marginal tax rate is 41.1 percent , up from 32 percent in 1954.

A few simple changes in tax policy could promote more economic growth, a higher standard of living for Americans, and higher revenues for government.

- Labor and capital should be taxed more equally. Because capital is currently taxed almost 50 percent higher than labor, tax rates on capital need to be lowered.
- Marginal tax rates of labor and capital should be brought closer to their *average* rates. Currently, economy-wide marginal tax rates on labor and capital are over one-fourth higher than their average tax rates.
- Tax rates on labor and capital are too high and both should be lowered. Although the previous two principles could be accomplished while holding the total tax take the same, additional growth benefits would result by lowering the total tax burden through reducing the size of government.

Looking Back to Move Forward: What Tax Policy Costs Americans and the Economy

Introduction

The American economy has seen better times. While the economy has been expanding since the latest recession ended in March of 1991, it is growing considerably slower than in the past. Economic output and investment are two-thirds of where they should be at this point in a recovery. Job creation is less than half of where it should be. Equally alarming, private and government forecasts place long-term real growth prospects between 2 to 2.5 percent, well below the average 3.2 percent experienced between 1946 and 1988.

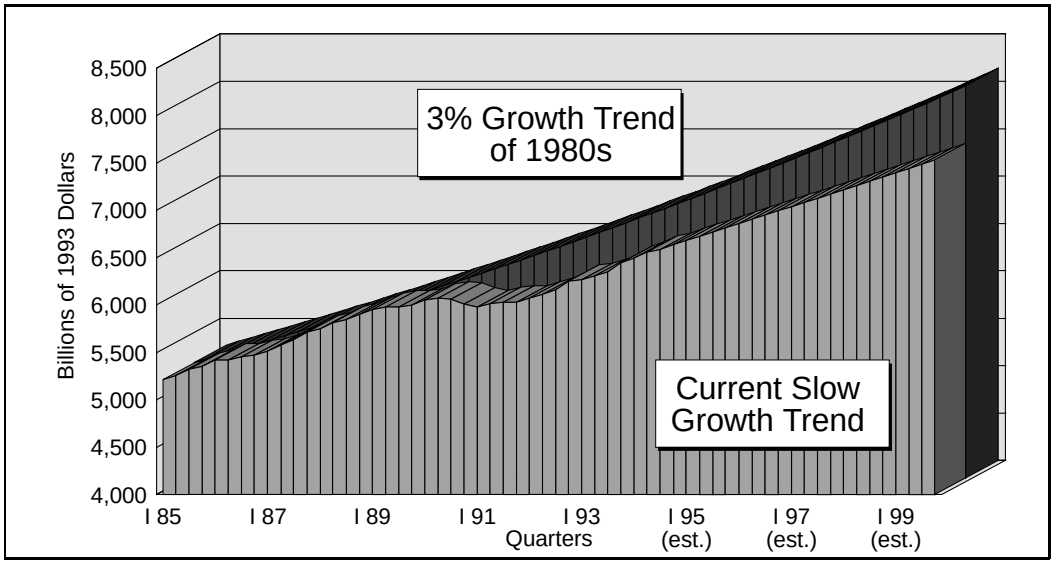
While a one percentage point difference in economic growth over one, two, or three years may seem insignificant, over several decades the impact on America's standard of living is enormous. For example, if the economy grows at a real rate of 3.5 percent while population grows at one percent, Americans would see their standard of living double in 30 years.[1] But if growth is held to 2.5 percent, it will take 50 years for the standard of living to double.

Slower growth since 1989 has already robbed Americans of higher living standards. Measured in today's dollars, real GDP is $1.3 trillion below what it would have been if the growth trend of the 1980s had been maintained. As a result, the average American is $5,200 worse off since 1989 and could lose another $10,000 during the rest of the decade. [See Figure 1.]

Figure 1

U.S. Real GDP Growth, 1985-1999 (projected)

The U.S. economy has lost over $1.3 trillion in real GDP since 1989 because the growth trend of the 1980s has not been maintained. And it will lose another $2.6 trillion between now and the end of the decade if the trend continues.



Economic performance affects government fortunes as well. The rate of growth helps determine the tax revenues used to pay for government services, the size of the deficit and the national debt. For instance, the federal government has lost some $200 billion in revenue because of below-trend growth since 1989 and could lose another $600 billion if this trend continues until the end of the decade. If lower-than-normal growth persists, higher budget deficits will have added over a half trillion dollars to the national debt in just over a decade.

The experience of the 1980s further underscores the importance of growth. For instance, Americans saw their standard of living improve by 27 percent from 1983 to 1988 when economic growth averaged 5 percent. The federal government saw its annual revenues almost double from $660 billion in 1983 to $1.1 trillion in 1989.

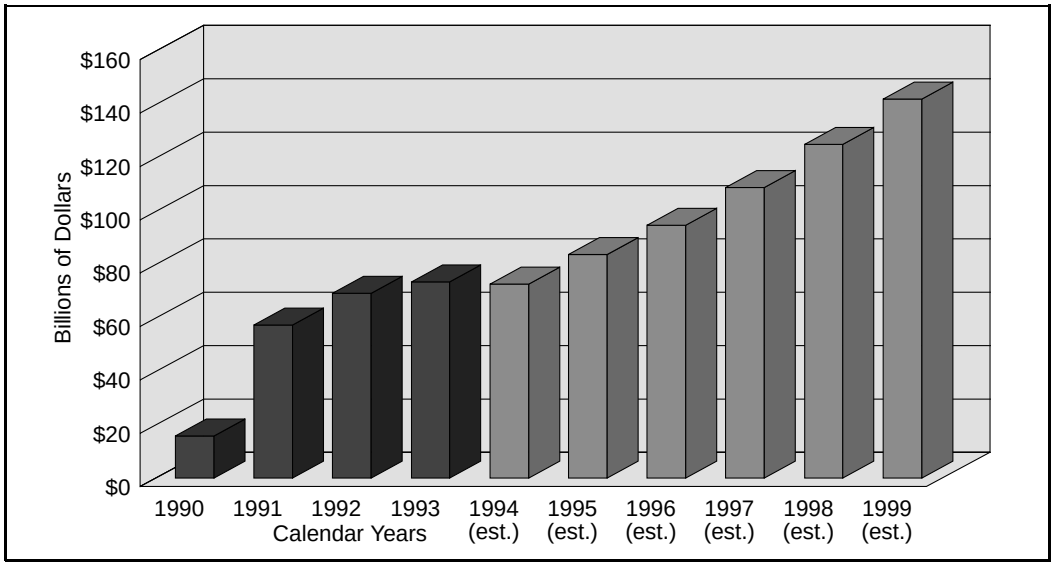


Figure 2

Revenue Loss Due to Slow Growth Trend

The economy created almost 3 million new jobs a year, far above the historical post World War II annual average of 1.6 million. Unfortunately, because federal spending increased much more rapidly than the growth in revenues, the budget deficit and the national debt also grew rapidly during this period.

Recent tax policy bears considerable responsibility for the significant downward shift in long-run U.S. growth prospects since the mid 1980s. Despite the dramatic reduction in statutory personal income tax rates made in the Tax Reform Act of 1986, tax rates on labor have been rising and are near historic highs. Tax rates on capital also have been increasing. Rising tax rates on the factors of production were a major cause of the 1990-91 recession and are a key contributor to current anemic growth.

Nobody likes to pay taxes. In an economic sense, taxes divert resources away from more efficient uses to government. But raising the revenues necessary to fund government services without destroying incentives to work, save and invest need not be mutually exclusive goals. President Kennedy recognized that high taxes can and do hinder economic growth. Arguing for tax cuts in 1962, he noted:

> *"It is a paradoxical truth that tax rates are too high today, and tax revenues are too low, and the soundest way to raise the revenues in the long run is to cut the tax rates."*[8]

Recent tax policy bears considerable responsibility for the significant downward shift in long-run U.S. growth prospects since the mid-1980s.

The Kennedy tax cuts not only spurred economic growth—the economy averaged a real annual growth rate of 4.6 percent between 1964 and 1969—but federal revenues grew at an annual rate of 7.5 percent after inflation. Today, despite the proven positive benefits of lowering tax rates and bringing average and marginal tax rates closer together, there remains substantial misinformation and misunderstanding about how tax increases affect the economy and the growth of federal revenues.

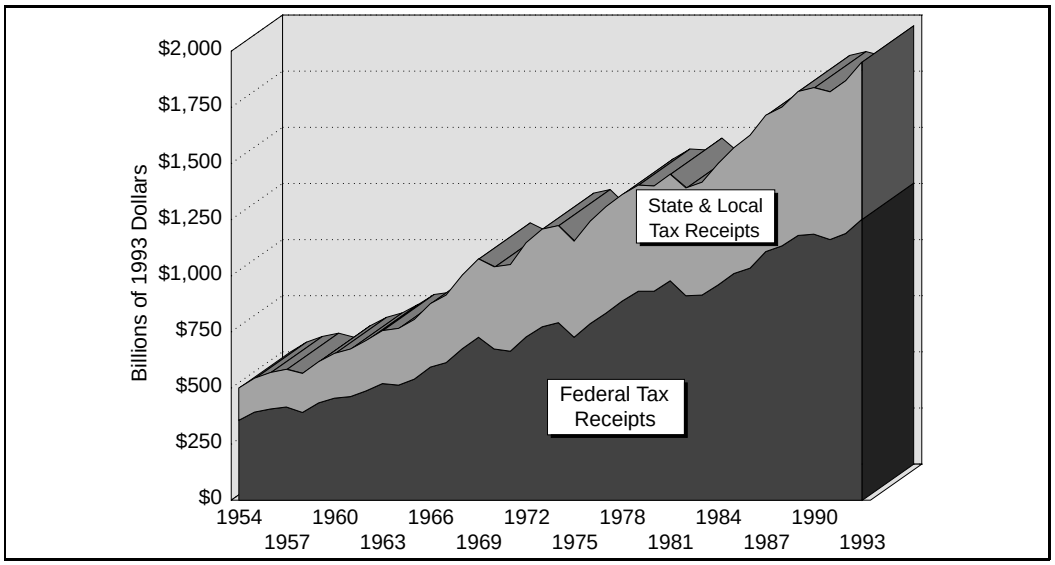
Tax policy over the last 40 years has been convoluted, often irrational and frequently counterproductive. This study puts the frequent changes in tax policy over the last four decades into historical perspective. It also identifies tax strategies that will raise sufficient revenues to fund government while promoting long-term economic growth. First, the study reviews the composition of federal, state and local taxes and how they have increased since 1954. Chapter 2 describes the main features of major federal tax bills since 1954 and discusses the policy climate that led to the legislation. Chapter 3 examines average and marginal tax rates on labor and capital since 1954. Chapter 4 explores how marginal and average tax rates affect the economy. Finally, Chapter 5 discusses a strategy for developing a pro-growth tax policy.

Chapter 1: U.S. Taxes, 1954 to 1993

Taxes are imposed on all sorts of activities by federal, state and local governments. As Figure 3 shows, total government receipts amounted to almost $2 trillion in 1993, up from $499 billion in 1954 (1993 dollars). Of that, the federal government collected the lion's share, almost $1.3 trillion.

Figure 3

Total Government Taxes, 1954-1993



Taxes have taken an increasing bite out of the U.S. economy and the average American's income over the last four decades. Today taxes claim as much of our economy as they ever have—30.6 percent of GDP compared to 24.1 percent in 1954 (see Figure 4). And taxes are also more burdensome. In 1993, Americans paid $7,554 per capita, compared to $3,073 in 1954.[2] That amounts to 34.5 percent of the average American's income compared to 26.6 percent in 1954 (see Tables 1, A-4 and A-9*).

**Tables A-1 through A-14 are found in the Appendix, beginning on page 34.*

Table 1

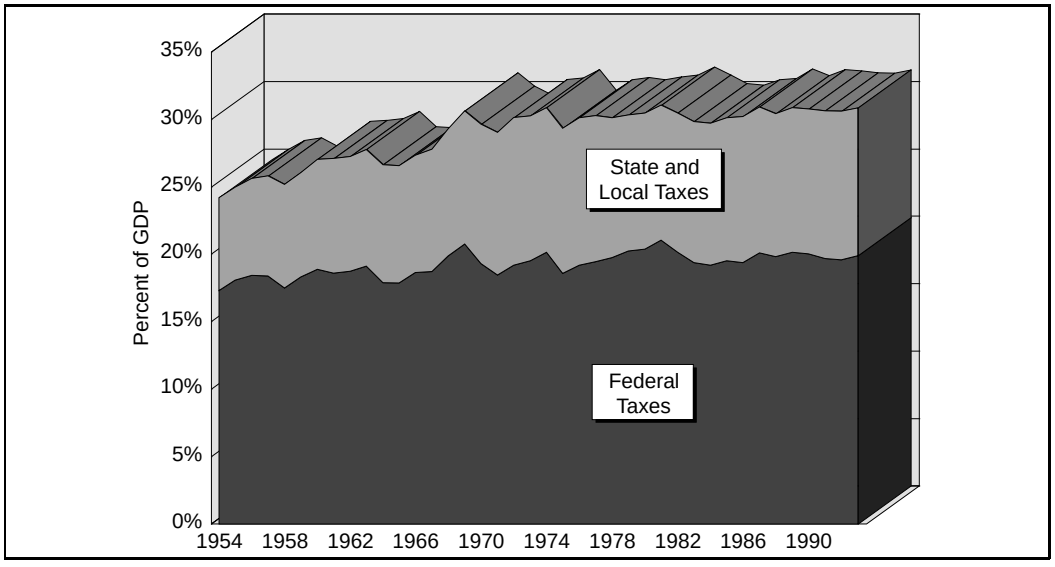
Federal, State & Local Taxes Per Capita and as a Percent of Income[1]

Year	In Billions of $1993			As a Percent of Per Capita Income[1]		
	Federal	State & Local	Total	Federal	State & Local	Total
1954	$ 2,197	$ 875	$ 3,073	19.0%	7.6%	26.6%
1964	2,674	1,318	3,993	19.3%	9.5%	28.8%
1974	3,703	2,015	5,718	21.8%	11.9%	33.6%
1984	4,064	2,283	6,347	21.1%	11.9%	33.0%

[1]National income plus indirect business taxes.

Figure 4

Total Government Taxes as a Percent of GDP



Federal taxes have remained fairly constant over the years, ranging from a low of 17.3 percent of GDP (and 19 percent of income) in 1954 to a high of 20.6 percent of GDP (23.4 percent of income) in 1981. In 1993, federal taxes claimed 19.6 percent of GDP and 22.1 of income. On a per capita basis, American paid $4,846 in federal taxes compared to $2,197 in 1954. [Figure 5.]

State and local taxes, on the other hand, have almost doubled from 6.9 percent of GDP in 1954 to 11 percent in 1993. On a per capita basis, American paid $2,708 in state and local taxes compared to $875 in 1954. [Figure 5.]

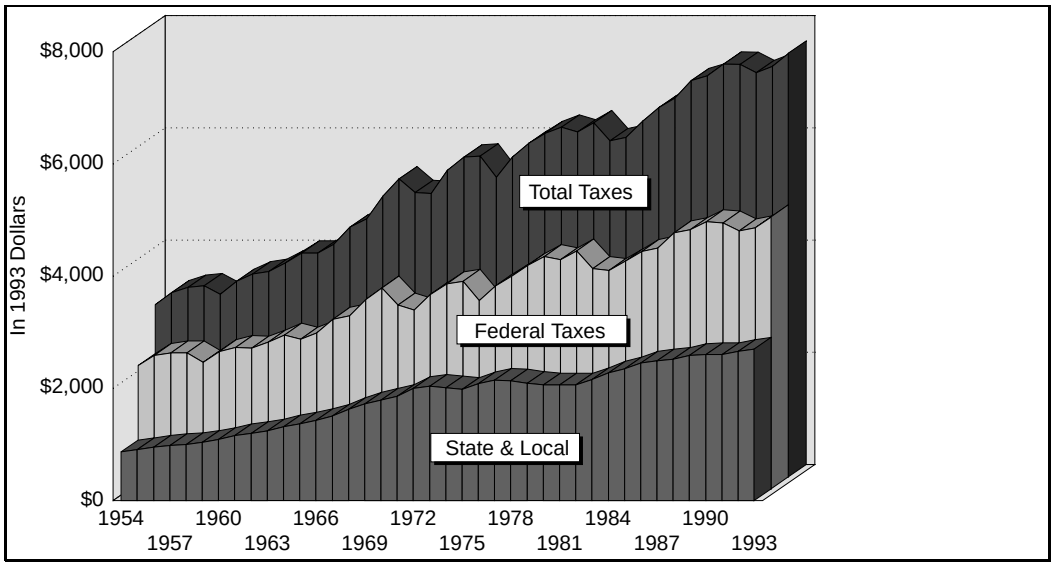


Figure 5

Total Government Taxes, Per Capita, 1954-1993

As Tables 3 (next page) and A-8 show, the major types of federal tax are personal, corporate, indirect business taxes, and payroll taxes for social insurance programs like Social Security, Medicare and unemployment insurance. Personal taxes are imposed on the labor and capital income of individuals. Corporate taxes fall on income of corporations before it is distributed to shareholders and then taxed again. Indirect business taxes are primarily excise taxes at the federal level and sales and property taxes at the state and local level.

Personal income and payroll taxes today account for 83 percent of the revenue collected by the federal government. As Table 2 shows, this has not always been the case. While personal taxes have been the largest single source of federal revenue since 1954, payroll tax receipts have more than tripled from 13.6 percent of federal taxes in 1954 to 41.4 percent today. By contrast, corporate income and excise tax receipts have dropped significantly over the past 40 years. [See Figure 6.]

	1954	1964	1974	1984	1993
Personal[1]	45.2%	42.1%	45.5%	43.5%	41.6%
Corporate	25.9%	21.7%	13.5%	8.1%	10.0%
Indirect Business[2]	15.3%	14.2%	7.7%	8.2%	7.0%
Payroll[3]	13.6%	22.1%	33.3%	40.2%	41.4%

[1]*Consists of personal income taxes, estate taxes, and fees.*

[2]*Consists mainly of excise taxes and custom duties*

Table 2

Changing Composition of Federal Taxes, 1954-1993

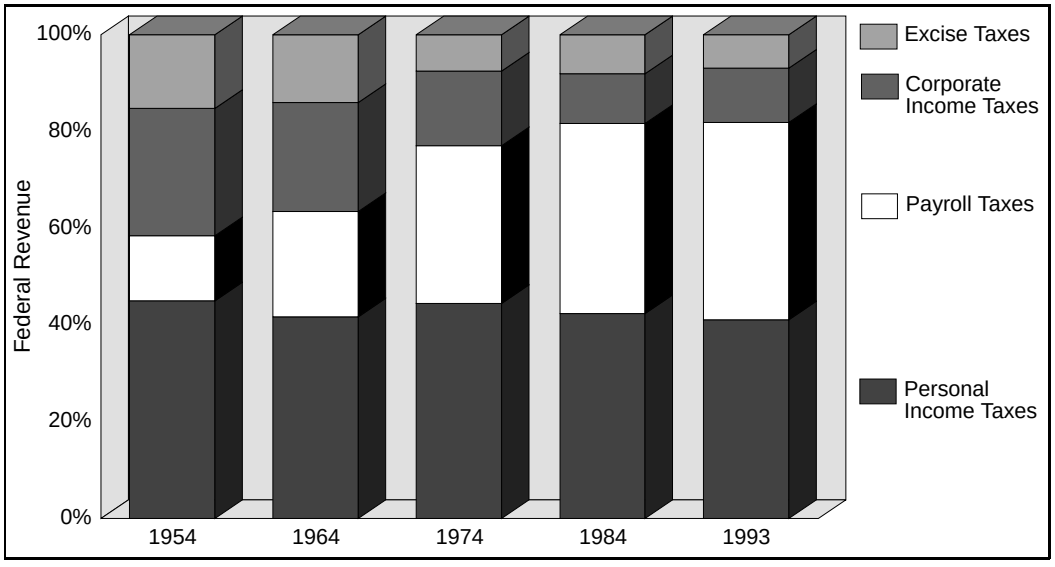
Table 3

Federal, State & Local Receipts by Type, Selected Years ($ billions)

	1954	1964	1974	1984	1993
Federal Receipts	$ 64.3	$ 116.2	$ 294.0	$ 725.8	$ 1,269.5
Personal tax and nontax receipts	29.0	48.4	130.9	308.0	521.3
Income taxes	28.0	45.8	126.0	301.5	506.7
Estate and gift taxes	0.9	2.6	4.8	6.0	13.0
Nontaxes	0.1	0.1	0.1	0.5	1.6
Corporate profits tax accruals	16.9	26.1	45.1	75.2	143.1
Federal Reserve banks	0.3	1.6	5.6	16.1	12.9
Other	16.6	24.6	39.6	59.2	127.7
Indirect business tax and nontax accruals	9.8	16.3	22.1	57.8	87.3
Excise taxes	9.0	14.2	16.5	36.3	50.3
Customs duties	0.5	1.3	3.7	11.9	19.8
Nontaxes	0.2	0.8	1.9	9.6	17.2
Contributions for social insurance	8.7	25.4	95.9	284.8	517.8
State & Local Receipts	28.4	67.1	200.6	492.2	888.1
Personal tax and nontax receipts	2.8	7.5	28.2	87.1	160.3
Income taxes	1.1	4.0	20.4	67.5	120.8
Nontaxes	0.5	0.7	2.2	8.7	19.7
Other	1.2	2.8	5.7	10.9	19.9
Corporate profits tax accrual	0.8	1.8	6.7	18.8	31.0
Indirect business tax and nontax accruals	19.9	42.6	107.2	251.7	443.1
Sales taxes	6.5	16.5	48.2	121.1	211.7

Figure 6

Composition of Federal Tax Receipts, 1954-1993



At the state and local level, sales and property taxes continue to be the largest source of revenue. As Table 4 shows, these and other indirect business (sales and property) taxes account for two-thirds of state and local tax revenues. The second largest source comes from personal income taxes which have almost doubled from 11 percent of total state and local taxes in 1954 to 22.8 percent today. Corporate income and payroll tax shares have remained fairly constant over time. [See Figure 7.]

	1954	1964	1974	1984	1993
Personal[1]	11.0%	13.3%	18.0%	21.9%	22.8%
Corporate	3.1%	3.2%	4.3%	4.7%	4.4%
Indirect Business[2]	78.0%	75.3%	68.4%	63.3%	63.1%
Payroll[3]	7.8%	8.3%	9.3%	10.1%	9.6%

1Consists of personal income taxes, estate taxes, and fees.

2Consists mainly of sales and property taxes.

3Contributions to social insurance.

Table 4

Changing Composition of State and Local Taxes, 1954 -1993

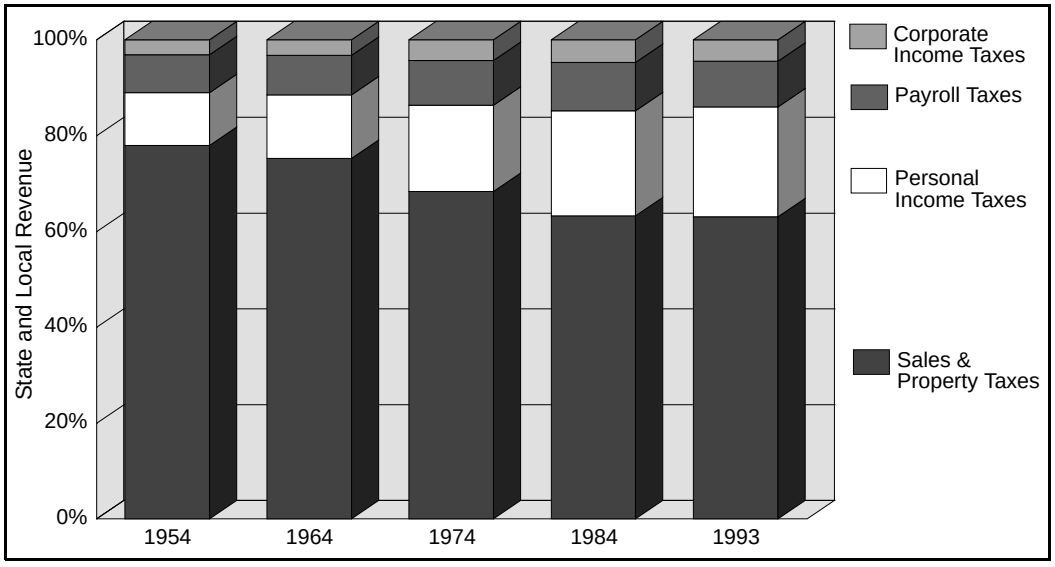


Figure 7

Composition of State & Local Tax Receipts, 1954 -1993

In conclusion, the tax mix may have changed, but the trend on taxes has been in one direction: Up.

Americans are working harder and longer than ever before to pay their taxes to federal, state and local governments. With taxes claiming more than one-third of income, American families today spend as much on taxes as they do on food, clothing and housing.[3]

Chapter 2: Major Tax Bills since 1954

Virtually every year since 1954 has seen the passage of some type of tax bill. Some merely extended tax preferences or made minor changes in existing taxes. Others were much more comprehensive. Major tax bills fall into two main categories that reflect the competing and often conflicting goals of tax policy. One category, motivated by prevailing economic considerations, was designed to either stimulate business activity through tax cuts or slow it down through tax increases. The other category, often motivated by political considerations, contained efforts aimed at redistributing the tax burden and making the tax code "fairer."

This section summarizes major tax bills since 1954.[4] It describes the principal provisions of these bills and indicates how they increased or decreased taxes on labor and capital (see Chapter 3 for a discussion of marginal tax rates on labor and capital). It shows the rate structures for corporations and individuals, the personal exemption and standard deduction, and the top tax rates for wealthier taxpayers and the percent of overall taxes they paid.

The Internal Revenue Code of 1954 (HR 8300)

Balanced budgets and deficit reduction, not economic growth, were the primary impetus behind federal tax policy during the immediate years following World War II. Public debt had grown from $17 billion in 1930 to $270 billion in 1946. Although federal spending plunged from $98 billion in fiscal year 1945 to $33 billion in 1948, the federal government registered deficits in eleven out of the next fifteen years.

During 1953 and 1954, President Eisenhower asked the Republican-controlled Congress for 25 changes to the Internal Revenue Code that would modestly lower the high World War II and Korean War tax rates. After extensive amendments, the result was HR 8300, which the Ways and Means Committee called "the first comprehensive revision [of the tax code] since enactment of the income tax" in 1913.[5]

The most controversial Eisenhower proposal was to allow taxpayers to subtract 15 percent of dividend income from their tax bills. Advocates on both sides used arguments that would be heard repeatedly in future tax debates. Democrats denounced the dividend credit as "relief for the rich." Republicans argued it was necessary to ease the "double taxation of corporate profits" and to provide an

Table 5

Effect of 1954 Tax Bills on Labor and Capital

Provision	Change in Marginal Tax Rate on:	
	Labor	Capital
$50 dividend exclusion; 4% credit	None	Lower
20% retirement income credit	None	Lower
$600 deduction for child care costs	Lower	None
Medical deduction for expenses over 3% of AGI	None	None
Extension of dependent exemption	None	None
Charitable deduction up to 30%	None	None
Accelerated depreciation	None	Lower
Net operating loss period of 8 years	None	Lower

incentive for investment. In the end, Congress approved a 4 percent credit after a $50 exclusion of dividend income. After that, Democrats repeatedly sought to repeal the provision, finally succeeding in 1964.[6]

Beside the dividend credit, HR 8300 added or expanded deductions and credits for items such as retirement income, child care costs, medical expenses, charitable contributions and dependents. It also contained an important incentive for investment. Businesses could accelerate depreciation write-offs for new plant and equipment with useful lives of at least three years by using the double-declining balance or sum-of-the-digit methods, an improvement over existing treatment.

These provisions effectively lowered tax rates on individuals and businesses. On balance, therefore, HR 8300 reduced tax rates on labor and capital.

The Eisenhower years also saw many changes in excise taxes which comprised about 15 percent of federal tax revenue. [See Table 2, page 5] Excise taxes were collected on a host of items including alcohol and tobacco products, cars and trucks, gasoline, home appliances, furs, jewelry, luggage, cameras, telephone services, sporting goods, pens and pencils, and general admission tickets. In 1954, the Congress reduced excise tax rates to help stimulate the economy. In 1956, excise taxes on gasoline and transportation goods were raised to set up a Highway Trust Fund to pay for an ambitious federal road-building project.

The Revenue Act of 1962 (HR 10650)

President Kennedy was the first Democratic president to argue that lower tax rates would help the economy grow and were an essential first step to covering the rising costs of government.[7] After four recessions in ten years, the Kennedy administration intended to make significant changes in both business and individual taxes. In a December 1962 speech to the Economics Club of New York, President Kennedy said the central problem with the economy was that:

> *. . . our present tax system exerts too heavy a drag on growth—that it siphons out of the private economy too large a share of personal and business purchasing power—that it reduces the financial incentives for personal effort, investment and risk-taking. . . . In short, to increase demand and lift the economy, the Federal Government's most useful role is not to rush into a program of excessive increases in public expenditures, but to expand the incentives and opportunities for private expenditures.*[8]

Business taxes were lowered in 1962 when the Congress enacted a watered-down version of the investment tax credit proposed by President Kennedy. Assets with useful lives of eight years or more were eligible for a 7 percent income tax credit subject to limitations.[9] The Act also revised the Treasury's outmoded depreciation schedule which specified the write-off periods for over 5,000 assets. The new schedule reduced the number of categories to 100 and cut the average depreciable life of manufacturing assets from 19 years to 12 years.

Table 6

Effect of Revenue Act of 1962 on Labor and Capital

Provision	Change in Marginal Tax Rate on:	
	Labor	Capital
7% investment tax credit	None	Lower
Reduction in depreciation lives	None	Lower

The Congress also enacted the Self-Employed Individual's Tax Retirement Act which set up Keogh plans. These plans allowed owner-employees to deposit 10 percent of their income (up to $2,500) in a retirement fund and deduct 50 percent of that amount for tax purposes.

Revenue Act of 1964 (HR 8363)

Although business taxes were lowered in the Revenue Act of 1962, reductions in individual taxes weren't enacted until 1964. Central to President Kennedy's proposal for individuals was a reduction in personal income tax rates. He proposed that the rates for the 27 brackets which ranged from 20% to 91% be lowered to a range of 14% to 65% over three years. [Table 24.] He also proposed cutting the capital gains tax rate from 40.5 percent to 19.5 percent along with several base-broadening measures.

Table 7

Effect of Revenue Act of 1964 on Labor and Capital

Provision	Change in Marginal Tax Rate on:	
	Labor	Capital
Personal rate reductions	Lower	Lower
Corporate rate deductions	None	Lower
Reduced real estate depreciation write-offs	None	Higher
$100 ($200) dividend exclusion	None	Higher

President Kennedy did not live to see Congress finally enact his tax cuts in 1964. The reductions were close to what Kennedy had asked for except that the top rate was set at 70% and not 65%. The bill instituted a minimum standard deduction of $300 for the taxpayer plus $100 for each exemption up to a maximum of $1,000. It increased taxes by disallowing deductions for various state, local and foreign excise taxes and by replacing the dividend credit with a $100 ($200) dividend exclusion for individuals (couples). Corporate tax rates also were reduced. The normal tax applied to the first $25,000 of profits was reduced from 30% to 22% while the surtax for profits over that amount went from 22% to 26%.

HR 8363 significantly cut tax rates on individuals and businesses, thereby lowering marginal tax rates on labor and capital.

The Revenue & Expenditure Control Act of 1968 (HR 15414)

After cutting taxes in 1964, this legislation raised them in 1968. Although the 1964 tax cuts had stimulated the economy and created higher federal revenues, tax increases were deemed necessary to help finance the growing Vietnam War and slow the economy in the hopes of dampening inflation.

Table 8

Effect of Revenue & Expenditure Control Act of 1968 on Labor and Capital

Provision	Change in Marginal Tax Rate on:	
	Labor	Capital
10% surcharge on individual income taxes	Higher	Higher
10% surcharge on corporate income taxes	None	Higher

The most notable provision of HR 15414 was a 10 percent surcharge on individual income taxes beginning April 1, 1968 and on corporate income taxes beginning on January 1, 1968. The surcharges were to remain in effect for two tax years. The bill also increased telephone and automobile excise taxes that were due to expire.

Because HR 15414's surtax and higher excise taxes raised taxes on individuals and businesses, marginal tax rates on labor and capital also increased.

The Tax Reform Act of 1969 (HR 13270)

After taking office in 1969, Richard Nixon wanted to continue the income tax surcharge as a way to restrain inflation. Congressional liberals, however, wanted tax reform. What resulted was a sizable overhaul of the federal tax code and a new trend in taxation that focused attention on making sure that everyone with income would pay tax.

Table 10

Effect of Tax Reform Act of 1969 on Labor and Capital

Provision	Change in Marginal Tax Rate on:	
	Labor	Capital
6-month extension of 5% income tax surcharge	Higher	Higher
Repeal of 7% investment tax credit	None	Higher
$150 increase in personal exemption	None	None
Increased standard deduction to 15% of income	None	None
Singles to pay no more than 20% of joint returns	Lower	Lower
Limited real estate depreciation write-offs	None	Higher
Reduced oil, gas & mineral depletion allowances	None	Higher
Increased alternative capital gains tax rates	None	Higher

Tax reform in the 1969 bill meant lowering *taxes* on individuals through increases in the personal exemption and standard deduction and raising marginal *tax rates* on capital and labor. A minimum standard deduction was to remove 5.5 million low-income taxpayers from the tax rolls while a new minimum 10-percent tax on tax-favored income of over $30,000 was supposed to assure that everyone paid tax. HR 13270 also extended the income surcharge at a 5% rate for six months and repealed the 7% investment tax credit. Other changes were aimed at restricting depreciation write-offs, increasing capital gains tax rates and reducing depletion allowances for oil, gas and minerals.

Although extension of the surcharge hurt individuals, HR 13270 primarily raised taxes on investors and businesses, thereby increasing the marginal tax rate on capital.

The Revenue Act of 1971 (HR 10947)

With the recession of 1970, President Nixon worried more about stimulating the economy than about inflation or budget deficits. Using administrative authority as President Kennedy had done in 1962, he accelerated depreciation write-offs by 20 percent through the "asset depreciation range" (ADR) schedule. To reassert its authority over depreciation matters, Congress modified the ADR program and provided tax cuts for individuals and business.

Table 9

Effect of Revenue Act of 1971 on Labor and Capital

Provision	Change in Marginal Tax Rate on:	
	Labor	Capital
Reinstated 7% investment tax credit	None	Lower
Modified Treasury's 1971 ADR depreciation system	None	Lower
Repealed automobile excise tax	Lower	Lower
Moved up scheduled personal exemption increases	None	None

HR 10947 reinstated the 7% investment tax credit that had been repealed in 1969. It also repealed the federal excise tax on automobiles. Individual taxes were cut by moving up the effective dates of increases in the personal exemption and standard deduction enacted in 1969.

Most of HR 10947's tax relief was aimed at business. In particular, the depreciation modification and investment tax credit helped lower the marginal tax rate on capital.

Tax Cuts of 1975 (HR 2166)

In response to the 1973-74 recession, the Congress passed $22.8 billion in tax cuts by the end of March 1975. Most of the tax relief was temporary. The major changes were a 10 percent rebate on individual income taxes for 1974 and a two-year increase to 10 percent in the investment tax credit. In response to the oil crisis, Congress increased taxes on the oil and gas industry through repeal of the depletion allowance and increases in taxes on foreign income.

The effect of HR 2166 was mixed. Changes in individual taxes moved to lower the marginal tax on labor. While the investment tax credit acted to lower the marginal tax on capital, changes aimed at the oil and gas industry increased it.

Table 11

Effect of Tax Cuts of 1975 on Labor and Capital

Provision	Change in Marginal Tax Rate on:	
	Labor	Capital
10% rebate (up to $200) on 1974 individual income taxes	None	None
Increased standard deduction for 1975 to 16% of AGI	None	None
10% Earned Income Tax Credit up to $400	Lower	None
Increased investment tax credit to 10% for 1975-76	None	Lower
Additional 1% investment credit allowed if benefits went to ESOPs	Lower	Lower

Tax Revision Bill of 1976 (HR 10612)

The Ways and Means Committee began holding tax revision hearings in 1973. Treasury Secretary William Simon had presented a comprehensive Treasury plan to encourage capital formation by ending the double taxation of corporate profits and dividends.[10]

Table 12

Effect of Tax Revision Bill of 1976 on Labor and Capital

Provision	Change in Marginal Tax Rate on:	
	Labor	Capital
Limited deductions from investment activities such as real estate, oil & gas, leasing activities, partnerships	None	Higher
Extended the 10% investment tax credit to 1980	None	Lower
Raised individual and corporate minimum tax from 10% to 15%	None	Higher
Made permanent 16% standard deduction	None	None
Extended to 1977 a credit against taxes owed of the greater of $35 or 2% of the first $9,000 in AGI	None	None
Limited business deductions for home office, vacation home, travel, stock option plan	Higher	Higher
Increased taxes on foreign income	None	Higher

What finally passed in September 1976, however, was a bill that largely focused on restricting the use of tax shelters through limiting deductions from various investments and increasing the minimum tax for individuals and corporations. Tax cuts took the form of extensions of tax credits passed in 1975. HR 10612 largely led to an increase in the marginal tax rate on capital.

Social Security Amendments of 1977 (HR 9346)

In December 1977—in an attempt to deal with the impending financial disaster caused by mistakes in the way the 1972 Social Security Amendments determined benefits—Congress was forced to raise payroll taxes by $227 billion over the next 10 years. At that time, this was the largest peacetime tax increase in American history.[11] Payroll tax rates were to increase, beginning in 1979, from previously scheduled levels. By 1990, the combined Social Security and Medicare tax rate would be 15.3 percent instead of 12.9 percent. Ad hoc wage ceiling increases of up to 36 percent were specified until 1982. After that, the ceiling, previously indexed to inflation, would increase with wages.

This tax legislation represented the largest single increase in the marginal tax rate on labor in history.

Table 13
Effect of Social Security Amendments of 1977 on Labor and Capital

Provision	Change in Marginal Tax Rate on:	
	Labor	Capital
Increased payroll tax rates from 12.9% to 15.3% by 1990	Higher	None
Up to 36 percent increase in wage ceiling	Higher	None

Tax Cut Bill of 1978 (HR 13511)

Congress reduced taxes in 1978 in part to offset the substantial increase in payroll taxes it passed the year before. Unlike prior tax bills from Democrat Congresses which had directed most relief to low-income taxpayers, the 1978 bill reduced tax rates on individuals and corporations. Capital gains tax rates were also lowered, and investment credits for plant and equipment were expanded. Despite these tax cuts, however, taxpayers at all income levels still paid more taxes in 1979 due to the payroll tax increases and the "bracket creep" from inflation.[12]

Most of HR 13511's tax relief helped lower the marginal tax on capital although changes to the brackets also lowered the tax rate on labor.

Table 14
Effect of Tax Cut Bill of 1978 on Labor and Capital

Provision	Change in Marginal Tax Rate on:	
	Labor	Capital
Reduced the number of and widened tax brackets	Lower	Lower
Reduced the rates in some brackets	Lower	Lower
Increased personal exemption from $750 to $1,000	None	None
Increased capital gains exclusion from 50% to 60%	None	Lower
Repealed alternative tax for capital gains	None	Lower
$100,000 capital gain exclusion for homeowners 55+	None	Lower
Repealed deductions for state and local gasoline taxes	Higher	Higher
Reduced top corporate rate from 48% to 46%	None	Lower
Made permanent and expanded the investment tax credit	None	Lower

The Economic Recovery Tax Act of 1981 (HR 4242)

Since 1978, the U.S. economy had been suffering stagflation which combined declining real growth with double-digit inflation and interest rates. During the 1980 presidential campaign Ronald Reagan had promised a package of individual and business tax cuts to reinvigorate the economy. By August 1981, the Congress passed the largest tax reduction bill in history. HR 4242 cut individual income tax rates by 25 percent (10/10/5) over three years beginning in 1982. Business taxes were to be reduced through a revamping of the depreciation schedule—the first major revision since 1972. However, as part of the compromise needed to pass the bill, depreciation reforms were to be phased in starting in 1985, and the value of depreciation write-offs was decreased relative to prior law for equipment put into place before 1985.

The most significant long-run shift in federal policy, however, were the indexing provisions designed to prevent inflation from pushing taxpayers into higher brackets as in the 1970s. Beginning in 1985, the bracket amounts along with personal exemptions and standard deductions of the individual income tax would be indexed to the Consumer Price Index, limiting future "bracket creep" and the government's reward from inflating the economy. As enacted, HR 4242 represented major reductions in the marginal tax rates on labor and capital.

Table 15

Effect of Economic Recovery Tax Act of 1981 on Labor and Capital

Provision	Change in Marginal Tax Rate on:	
	Labor	Capital
25% reduction in individual income tax rates	Lower	Lower
Reduction in the top rate from 70% to 50%	Lower	Lower
Inflation-indexing for individual income tax brackets, standard deduction and personal exemption in 1985	Lower	Lower
Accelerated cost recovery system (ACRS) write-offs ranging from 3 years for equipment to 15 years for structures	None	Lower
Safe-harbor leasing allowing firms to sell unused tax deductions	None	Lower
10% (up to $3,000) deduction for married couples	Lower	Lower

The Tax Equity and Fiscal Responsibility Act of 1982 (HR 4961)

No sooner had the tax cuts of 1981 been enacted than mounting deficits from the 1981-82 recession led to calls for tax increases. What resulted was a 1982 tax bill that was labeled a loophole closer. To raise revenue, HR 4961 repealed most of the depreciation relief that had been scheduled for 1985 and after and imposed new excise taxes. As a result, two-thirds of the business tax cuts intended by ERTA never came to pass. HR 4961, therefore, led to increased marginal tax rates on capital.

Table 16

Effect of Tax Equity and Fiscal Responsibility Act of 1982 on Labor and Capital

Provision	Change in Marginal Tax Rate on:	
	Labor	Capital
Repealed ACRS provisions for 1985 and 1986	None	Higher
Limited safe-harbor leasing	None	Higher
Repealed $150 deduction for health insurance	None	None
Lowered contributions limits to pension plans	Higher	Higher
Increased alternative minimum tax for individuals	None	Higher
Increased airline, telephone and cigarette excise taxes	Higher	Higher

The Tax Reform Act of 1986 (HR 3838)

With the economy growing, Washington again turned to reforming the tax code. Both Republicans and Democrats agreed on the goals of simplicity, fairness and growth. Fairness was particularly aimed at reversing the trend in the falling share of corporate income taxes over the last several decades. [See Table 2, page 5.] President Reagan also insisted that reform be "revenue neutral," neither raising nor lowering total taxes.

Table 17

Effect of Tax Reform Act of 1986 on Labor and Capital

Provision	Change in Marginal Tax Rate on:	
	Labor	Capital
Reduced brackets to two—15% and 28%	Lower	Lower
Increased zero bracket & personal exemptions	None	None
Repealed two-earner deduction, income averaging, and state & local sales tax deduction	Higher	Higher
Repealed 60% capital gains exclusion for individuals	None	Higher
Limited deductability of Individual Retirement Accounts	Higher	Higher
Reduced top corporate income tax rate from 46% to 34%	None	Lower
Repealed investment tax credit	None	Higher

What resulted was the most significant reform of the tax code since 1954. Generally, the legislation lowered tax rates while broadening the tax base. The top individual rate was significantly lowered from 50 to 28 percent (with a transitional 33 percent rate), the number of brackets was reduced from eleven to two (three with the temporary 33 percent rate), and various deductions were eliminated, signaling a major shift toward a flatter tax. Although the top rate for corporations was lowered from 48 to 34 percent, the remaining depreciation changes from 1981 were rolled back and other corporate deductions were eliminated. Generally, taxes on individuals (labor) were lowered while taxes on business (capital) were raised.[13]

Omnibus Budget Reconciliation Act of 1990 (HR 5835)

By 1990, the economy was headed into recession after eight years of economic expansion. Despite numerous budget summits and deficit reduction plans, the federal deficit was deemed out of control. The Bush administration and Congressional leaders of both parties held extensive negotiations during the spring and summer of 1990 to reduce the deficit. What finally resulted was the Omnibus Budget Reconciliation Act of 1990 which promised $500 billion in deficit reduction over the next five years. Part of that was to come through $168 billion in higher taxes. The most significant change was the addition of a third income tax bracket at 31 percent less than four years after tax reform had eliminated all but two brackets. A 10 percent luxury tax on expensive cars, boats, furs and jewelry also was added. The increase in individual tax rates and higher excise taxes raised the marginal tax rates on labor and on capital.

Table 18

Effect of Omnibus Budget Reconciliation Act of 1990 on Labor and Capital

Provision	Change in Marginal Tax Rate on:	
	Labor	Capital
Added third income tax rate of 31%	Higher	Higher
Phased out personal exemptions and deductions for singles above $100,000 and couples above $150,000	Higher	Higher
Increased Medicare payroll tax base to $125,000	Higher	None

Omnibus Budget Reconciliation Act of 1993 (HR 2264)

During the presidential campaign, Bill Clinton called for raising taxes on the rich and giving the middle class a tax break. After the election, however, attention focused again on deficit reduction. Despite the budget summit agreement less than three years earlier, the public debt had increased by almost $1 trillion. The bill that finally passed Congress in 1993 continued movement away from the 1986 tax reform by adding two more brackets, 36 and 39.6 percent, to the individual income tax and raising the corporate tax rate a point from 34 to 35 percent. Ironically, the luxury tax on boats, furs, and jewelry (but not automobiles) was repealed because the tax had reduced sales and employment in these industries. Additionally, the federal gasoline tax was increased.

Table 19

Effect of Omnibus Budget Reconciliation Act of 1993 on Labor and Capital

Provision	Change in Marginal Tax Rate on:	
	Labor	Capital
Added fourth and fifth income tax rates of 36% and 39%	Higher	Higher
Taxed up to 85% of Social Security benefits	Higher	Higher
Expanded the Earned Income Tax Credit	None	None
Increased top corporate rate from 34% to 35%	None	Higher
Increased gasoline excise tax	Higher	Higher

As the 1990 Omnibus Budget Reconciliation Act had done, this legislation's increases in individual tax rates and excise taxes raised the marginal tax rates on labor and on capital.

Summary: Tax Trends Since 1954

Tax policy does affect the economy, although not always in the manner policymakers envision when they change the tax code. At least two points emerge from this brief survey of the federal tax policy of the last four decades. First, the U.S. economy experienced sustained periods of robust growth after the tax cuts of 1964 and 1981 which significantly lowered *marginal* tax rates on capital and labor. Tax bills which raised taxes, as in 1968, 1977 and 1990, or tried to restructure the code, as in 1969, 1976 and 1986, were often followed by recession or periods of slower growth.

As statutory marginal tax rates have come down the share of individual income taxes paid by the top 25 percent of taxpayers has increased from about 70 percent to about 78 percent.

Second, *the share of taxes paid by wealthier taxpayers tends to increase when marginal tax rates are lowered.* For instance, the highest one percent of taxpayers paid 25.1 percent of federal individual income taxes in 1954 when the top marginal rate was 91 percent. In 1992, this group paid 26.8 percent of individual income taxes even though the top rate was only 31 percent. As statutory marginal tax rates have come down the share of individual income taxes paid by the top 25 percent of taxpayers has increased from about 70 percent to about 78 percent. It is clear that as people are allowed to keep a higher percentage of their incomes, the wealthy actually pay a greater percentage of the total tax burden. [See Figures 8 and 9, and Tables 20 and 21.]

Federal income taxes are only part of the overall tax picture, however. Other federal taxes and taxes imposed by state and local governments also must be taken into account in sorting out economic effects. For example, although federal tax rates were coming down during the late 1980s, state and local government taxes were on the increase. The next section develops measures that include all taxes on capital and labor.

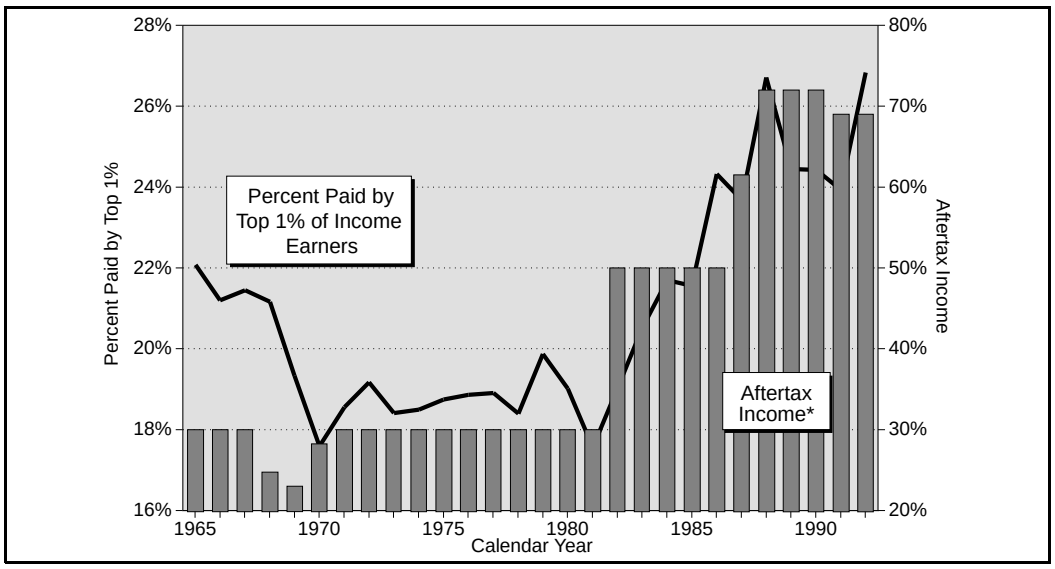


Figure 8

Total Individual Income Tax Paid by Top 1% of Returns

**Aftertax Income is 1 minus the top marginal tax rate.*

A last word about the difficulty in relating tax policy to the economy has to do with measurement problems. Historical data, such as used in this study, is unavoidably *ex post*, or after the fact. The ideal measure is the prospective, or *ex ante*, tax rate facing the worker or investor. Unfortunately, because historical data reflect behavior changes made in response to tax policy changes, they understate the true effect of those changes.

A classic example is the 1986 attempt to raise the marginal tax rate on capital gains—both realized and unrealized. Because taxpayers realized a much lower percent of their accrued gains in response to the higher *ex ante* rate, the *ex post* measure of the tax rate on capital gains went down, and the government lost revenue in the process. In general, *ex post* tax rate measures understate tax rate changes because people change their behavior.

Year	1%	5%	10%	25%	Top Marginal Rate
1954	25.1%	40.0%	51.0%	70.9%	91.0%
1964	20.8%	36.7%	46.9%	68.7%	77.0%
1974	18.5%	35.0%	46.8%	70.1%	70.0%
1984	21.7%	37.8%	49.2%	73.7%	50.0%

Table 20

Share of Income Tax Paid by Taxpayers in Top 1%, 5%, 10% and 25% of Adjusted Gross Income Classes

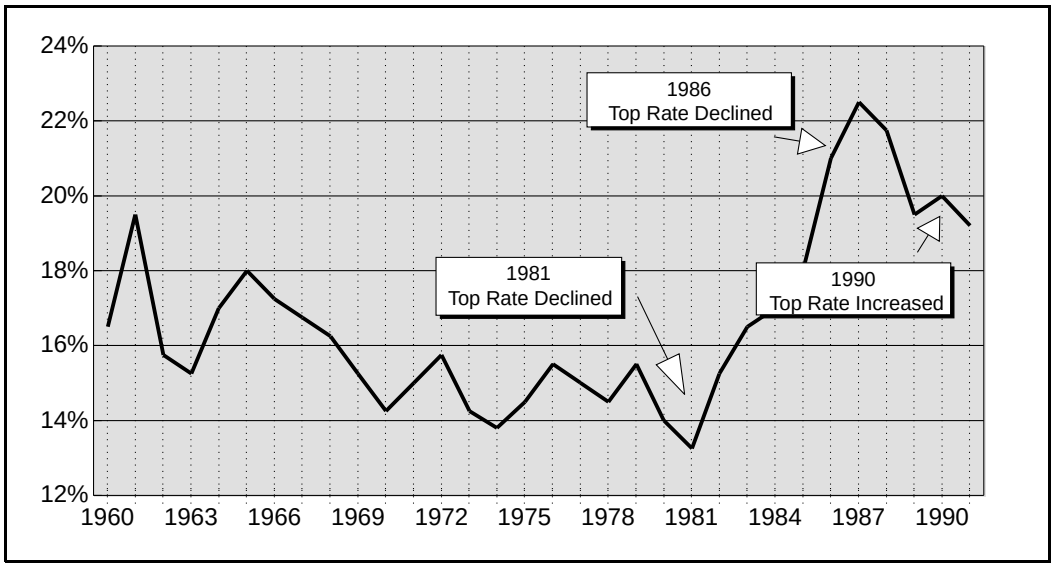


Figure 9

Percent of Tax Burden Paid by Top 1/2% of AGI Distribution

Source: Robert J. Barro, Wall Street Journal, July 9, 1993

Table 21

Share of Income Tax Paid by Taxpayers in the Top 1%, 5%, 10% and 25% of Adjusted Gross Income Classes (percent)

Year	1%	5%	10%	25%	Top Marginal Rate
1954	25.1%	40.0%	51.0%	70.9%	91.00%
1955	24.8%	40.1%	50.1%	69.8%	91.00%
1956	23.7%	39.2%	48.8%	68.8%	91.00%
1957	22.6%	37.7%	47.6%	68.1%	91.00%
1958	22.0%	37.3%	47.8%	68.8%	91.00%
1959	22.3%	37.0%	48.0%	69.0%	91.00%
1960	20.7%	35.4%	47.0%	68.6%	91.00%
1961	21.3%	36.1%	48.1%	69.5%	91.00%
1962	19.9%	34.7%	46.3%	68.2%	91.00%
1963	19.5%	34.8%	45.7%	67.7%	91.00%
1964	20.8%	36.7%	46.9%	68.7%	77.00%
1965	22.1%	38.3%	47.8%	69.3%	70.00%
1966	21.2%	37.2%	47.1%	69.1%	70.00%
1967	21.4%	37.7%	47.9%	69.7%	70.00%
1968	21.2%	37.3%	48.3%	70.2%	75.25%
1969	19.3%	35.6%	46.9%	68.2%	77.00%
1970	17.6%	34.1%	45.0%	66.8%	71.75%
1971	18.6%	35.2%	46.4%	68.2%	70.00%
1972	19.2%	36.0%	47.5%	69.4%	70.00%
1973	18.4%	35.4%	47.4%	69.5%	70.00%
1974	18.5%	35.0%	46.8%	70.1%	70.00%
1975	18.7%	36.4%	48.5%	71.7%	70.00%
1976	18.9%	36.6%	49.8%	72.2%	70.00%
1977	18.9%	36.0%	50.0%	73.4%	70.00%
1978	18.4%	34.8%	49.6%	73.5%	70.00%
1979	19.9%	35.4%	48.8%	73.0%	70.00%
1980	19.0%	35.3%	47.2%	72.8%	70.00%
1981	17.6%	34.6%	45.4%	72.3%	70.00%
1982	19.0%	36.1%	46.1%	72.3%	50.00%
1983	20.5%	37.4%	47.5%	73.0%	50.00%
1984	21.7%	37.8%	49.2%	73.7%	50.00%
1985	21.6%	38.3%	50.6%	73.0%	50.00%
1986	24.3%	41.6%	54.2%	74.0%	50.00%
1987	23.7%	42.7%	55.1%	76.6%	38.50%
1988	26.7%	45.5%	56.5%	77.6%	28.00%
1989	24.5%	43.8%	54.9%	76.9%	28.00%

Table 22

Statutory Corporate Income Tax Rates, Tax Years 1952-1994

Tax Year	Income Brackets	Tax Rate
1952 to 1963	First $25,000 Over $25,000	30% 52%
1964	First $25,000 Over $25,000	22% 50%
1965 to 1967	First $25,000 $25,000 to $50,000 Over $50,000	22% 48% 30%
1968 to 1969	First $25,000 Over $25,000	24.2% 52.8%
1970	First $25,000 Over $25,000	22.55% 49.2%
1971 to 1974	First $25,000 Over $25,000	22% 48%
1975 to 1978	First $25,000 $25,000 to $50,000 Over $50,000	22% 24% 48%
1979 to 1981	First $25,000 $25,000 to $50,000 $50,000 to $75,000 $75,000 to $100,000 Over $100,000	17% 20% 30% 40% 48%
1982	First $25,000 $25,000 to $50,000 $50,000 to $75,000 $75,000 to $100,000 Over $100,000	16% 19% 30% 40% 46%
1983	First $25,000 $25,000 to $50,000 $50,000 to $75,000 $75,000 to $100,000 Over $100,000	15% 18% 30% 40% 46%
1984 to 1986	First $25,000 $25,000 to $50,000 $50,000 to $75,000 $75,000 to $100,000 $100,000 to $1,000,000 $1,000,000 to $1,405,000 Over $1,405,000	15% 18% 30% 40% 46% 51% 46%

Table 23

Value of Personal Exemption, 1954 to 1993

1954 to 1969	1970	1971	1972 to 1978	1979 to 1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
$ 600	$ 625	$ 675	$ 750	$1,000	$1,040	$1,080	$1,900	$1,950	$2,000	$2,050	$2,150	$2,300	$2,350

Table 24

Rate Schedule for Joint Returns, 1954-1993

1954-1963		1964		1965-1976	
Above	**Rate**	**Above**	**Rate**	**Above**	**Rate**
$ 0	20.0%	$ 0	16.0%	$ 0	14.0%
4,000	22.0%	1,000	16.5%	1,000	15.0%
8,000	26.0%	2,000	17.5%	2,000	16.0%
12,000	30.0%	3,000	18.0%	3,000	17.0%
16,000	34.0%	4,000	20.0%	4,000	19.0%
20,000	38.0%	8,000	23.5%	8,000	22.0%
24,000	43.0%	12,000	27.0%	12,000	25.0%
28,000	47.0%	16,000	30.5%	16,000	28.0%
32,000	50.0%	20,000	34.0%	20,000	32.0%
36,000	53.0%	24,000	37.5%	24,000	36.0%
40,000	56.0%	28,000	41.0%	28,000	39.0%
44,000	59.0%	32,000	44.5%	32,000	42.0%
52,000	62.0%	36,000	47.5%	36,000	45.0%
64,000	65.0%	40,000	50.5%	40,000	48.0%
76,000	69.0%	44,000	53.5%	44,000	50.0%
88,000	72.0%	52,000	56.0%	52,000	53.0%
100,000	75.0%	64,000	58.5%	64,000	55.0%
120,000	78.0%	76,000	61.0%	76,000	58.0%
140,000	81.0%	88,000	63.5%	88,000	60.0%
1600,00	84.0%	100,000	66.0%	100,000	62.0%
180,000	87.0%	120,000	68.5%	120,000	64.0%
200,000	89.0%	140,000	71.0%	140,000	66.0%
300,000	90.0%	160,000	73.5%	160,000	68.0%
400,000	91.0%	180,000	75.0%	180,000	69.0%
		200,000	76.5%	200,000	70.0%
		300,000	76.5%		
		400,000	77.0%		

1977		1978		1979-1981	
Above	**Rate**	**Above**	**Rate**	**Above**	**Rate**
$ 0	0.0%	$ 0	0.0%	$ 0	0.0%
2,200	14.0%	3,200	14.0%	3,400	14.0%
3,200	15.0%	4,200	15.0%	5,500	16.0%
4,200	16.0%	5,200	16.0%	7,600	18.0%
5,200	17.0%	6,200	17.0%	11,900	21.0%
6,200	19.0%	7,200	19.0%	16,000	24.0%
10,200	22.0%	11,200	22.0%	20,200	28.0%
14,200	25.0%	15,200	25.0%	24600	32.0%
18,200	28.0%	19,200	28.0%	29,900	37.0%
22,200	32.0%	23,200	32.0%	35,200	43.0%

Table 24 (Cont.)

1977		1978		1979 -1981	
Above	**Rate**	**Above**	**Rate**	**Above**	**Rate**
$ 26,200	36.0%	$ 27,200	36.0%	$ 45,800	49.0%
30,200	39.0%	31,200	39.0%	60,000	54.0%
34,200	42.0%	35,200	42.0%	85,600	59.0%
38,200	45.0%	39,200	45.0%	109,400	64.0%
42,200	48.0%	43,200	48.0%	162,400	68.0%
46,200	50.0%	47,200	50.0%	215,400	70.0%
54,200	53.0%	55,200	53.0%		
66,200	55.0%	67,200	55.0%		
78,200	58.0%	792,00	58.0%		
90,200	60.0%	91,200	60.0%		
102,200	62.0%	103,200	62.0%		
122,200	64.0%	123,200	64.0%		
142,200	66.0%	143,200	66.0%		
162,200	68.0%	163,200	68.0%		
182,200	69.0%	183,200	69.0%		
202,200	70.0%	203,200	70.0%		

1982		1983		1984	
Above	**Rate**	**Above**	**Rate**	**Above**	**Rate**
$ 0	0.0%	$ 0	0.0%	$ 0	0.0%
3,400	12.0%	3,400	11.0%	3,400	11.0%
5,500	14.0%	5,500	13.0%	5,500	12.0%
7,600	16.0%	7,600	15.0%	7,600	14.0%
11,900	19.0%	11,900	17.0%	11,900	16.0%
16,000	22.0%	16,000	19.0%	16,000	18.0%
20,200	25.0%	20,200	23.0%	20,200	22.0%
24,600	29.0%	24,600	26.0%	24,600	25.0%
29,900	33.0%	29,900	30.0%	29,900	28.0%
35,200	39.0%	35,200	35.0%	35,200	33.0%
45,800	44.0%	45,800	40.0%	45,800	38.0%
60,000	49.0%	60,000	44.0%	60,000	42.0%
85,600	50.0%	85,600	48.0%	85,600	45.0%
		109,400	50.0%	109,400	49.0%
				162,400	50.0%

Table 24 (Cont.)

1985		1986		1987	
Above	**Rate**	**Above**	**Rate**	**Above**	**Rate**
$ 0	0.0%	$ 0	11.0%	$ 0	11.0%
3,540	11.0%	2,270	12.0%	3,000	15.0%
5,720	12.0%	4,530	14.0%	28,000	28.0%
7,910	14.0%	9,170	16.0%	45,000	35.0%
12,390	16.0%	13,600	18.0%	90,000	38.5%
166,50	18.0%	18,130	22.0%		
21,020	22.0%	22,880	25.0%		
25,600	25.0%	28,600	28.0%		
31,120	28.0%	34,310	33.0%		
36,630	33.0%	45,750	38.0%		
47,670	38.0%	61,080	42.0%		
62,450	42.0%	88,700	45.0%		
89,090	45.0%	114,380	49.0%		
113,860	49.0%	171,580	50.0%		
169,020	50.0%				
1988		**1989**		**1990**	
Above	**Rate**	**Above**	**Rate**	**Above**	**Rate**
$ 0	15.0%	$ 0	15.0%	$ 0	15.0%
29,750	28.0%	30,950	28.0%	32,450	28.0%
71,900	33.0%	74,850	33.0%	78,400	33.0%
149,250	28.0%	155,320	28.0%	162,770	28.0%
1991		**1992**		**1993**	
Above	**Rate**	**Above**	**Rate**	**Above**	**Rate**
$ 0	15.0%	$ 0	15.0%	$ 0	15.0%
34,000	28.0%	35,800	28.0%	36,900	28.0%
82,150	31.0%	86,500	31.0%	89,150	31.0%
				140,000	36.0%
				250,000	39.6%

Table 25

Standard Deduction, 1954-1993

Percentage Deduction			
1954 to 1970	10% of AGI up to $1,000		
1971	13% of AGI up to $2,000		
1971 to 1974	15% of AGI up to $2,000		
	Joint	**Others**	
1975	15% of AGI up to $2,600	15% of AGI up to $2,300	
1976	16% of AGI up to $2,800	16% of AGI up to $2,400	
Minimum Standard Deduction			
1964 to 1969	$200 plus $100 times the number of exemptions up to $1,000		
1970	$ 1,000		
1971	$ 1,050		
1972 to 1974	$ 1,300		
	Joint	**Others**	
1975	$ 1,900	$ 1,600	
1976	2,100	1,700	
Flat Standard Deduction			
	Joint	**Others**	
1977 to 1978	$ 3,200	$ 2,200	
1979 to 1984	3,400	2,300	
1985	3,540	2,390	
1986	3,670	2,480	
1987	3,760	2,540	
	Joint	**Single**	**Head of Household**
1988	$ 5,000	$ 3,000	$4,400
1989	5,200	3,100	4,550
1990	5,450	3,250	4,750
1991	5,700	3,400	5,000
1992	6,000	3,600	5,250
1993	6,200	3,700	5,450

Taxes Rates on Labor and Capital, 1954 to 1993

As the preceding chapter documents, tax policy over the last 40 years has often changed course. Efforts to raise revenue and reduce deficits through tax increases often failed because the economy went into recession. Tax cuts, particularly in 1964 and 1981, were successful in stimulating the economy and raising revenues but often led to charges that wealthier taxpayers and business were not paying "their fair share."

Who Pays the Taxes?

Much of the problem with tax policy since 1954 is its focus on who pays the taxes while ignoring the labor or asset that is actually being taxed. For instance, the income tax is not a tax on people but on the income they earn as workers and as owners of capital. Corporate income taxes are not taxes on corporations but on the income that would otherwise go to shareholders who own the company.

Similarly, although a property tax is nominally levied against physical assets, usually at a seemingly low rate, the government does not accept title to an apportioned share of the property as payment. Rather it requires cash that ultimately must be paid out of the income produced by the asset. Because the income of the asset is normally a small portion of its total value, the actual *effective* rate of tax is many times the apparent property tax rate.

In sum, taxes on people, businesses and assets are actually taxes on the factors of production. An individual, business, or asset must produce and sell something of value to generate income from which to pay taxes. That income ultimately consists of either a return to labor or a return to capital.

The nation would be better served if policy makers focused on how proposed changes in the tax code would affect the tax rates on labor and capital—the factors of production—as opposed to illusory goals such as "fairness" or income redistribution.

This chapter derives the average and marginal tax rates on labor and capital since 1954 and discusses how the major tax bills have affected those rates. For a description of how these tax rates were calculated, see Appendix I.

Average and Marginal Tax Rates on Labor

Average tax rates on labor and capital are higher today than they were in 1954. [See Table A-5.] Labor has experienced the largest increases. The average tax rate on labor was 30.8 percent in 1993 compared to 20.1 percent in 1954. In other words, government claims 31 cents of every dollar in total labor compensation received by the average U.S. worker today. Three-fourths of the tax on labor goes to the federal government, while state and local governments take the remaining one-third. In 1954, the federal government got 83 percent of labor taxes.[14] [See Table A-12.]

Marginal tax rates on labor are even higher. [See Tables 26, A-6 and Figure 10.] On average, a worker today must give up 40 cents out of the next dollar of labor compensation in taxes. The federal government gets 31 cents, while state and local governments receive 9 cents. In 1954, taxes claimed 32 cents of the next labor compensation dollar, of which the federal government received 28 cents.

The main factors behind changes in the tax rates on labor are payroll and personal income taxes. Increases in the payroll tax rate for Social Security and Medicare and expansion of the wage base have increased the average and marginal tax rates on labor.[15] Similarly, higher personal income tax rates have increased the

	Total	Labor[1]	Capital[2]	Private Business	Owner-Occupied Housing
1954	36.3%	32.0%	48.5%	53.6%	16.9%
1964	38.1%	33.1%	51.1%	57.6%	19.9%
1974	44.0%	41.0%	53.6%	60.2%	23.9%
1984	46.0%	43.9%	52.4%	61.1%	18.0%
1993	43.7%	40.4%	54.6%	62.7%	21.3%
1994 (est.)	44.8%	41.1%	57.1%	65.8%	21.3%
1995 (est.)	45.8%	42.1%	57.7%	66.3%	21.2%

Table 26

Marginal Tax Rates on U.S. Labor and Capital, 1954-1996

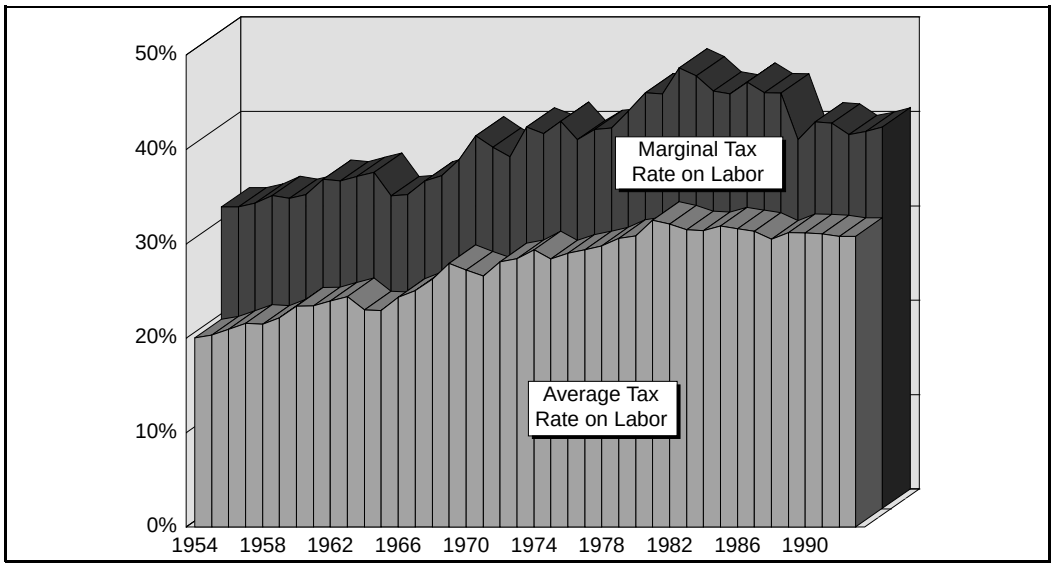


Figure 10

Average and Marginal Tax Rates on Labor

average and marginal tax rates on labor while rate reductions have lowered them. While changes that operate on the first dollar of wage income, such as increases in the personal exemption or standard deduction, affect the average tax rate on labor, they have virtually no effect on the marginal tax rate.

As Table A-7 and Figure 11 show, the influence of payroll taxes has increased over time. Although still the most important component, personal income taxes account for 54 percent of marginal tax rate on labor today, down from 71 percent in 1954. The share due to payroll taxes, however, has increased from 13.5 percent to 33.6 percent.

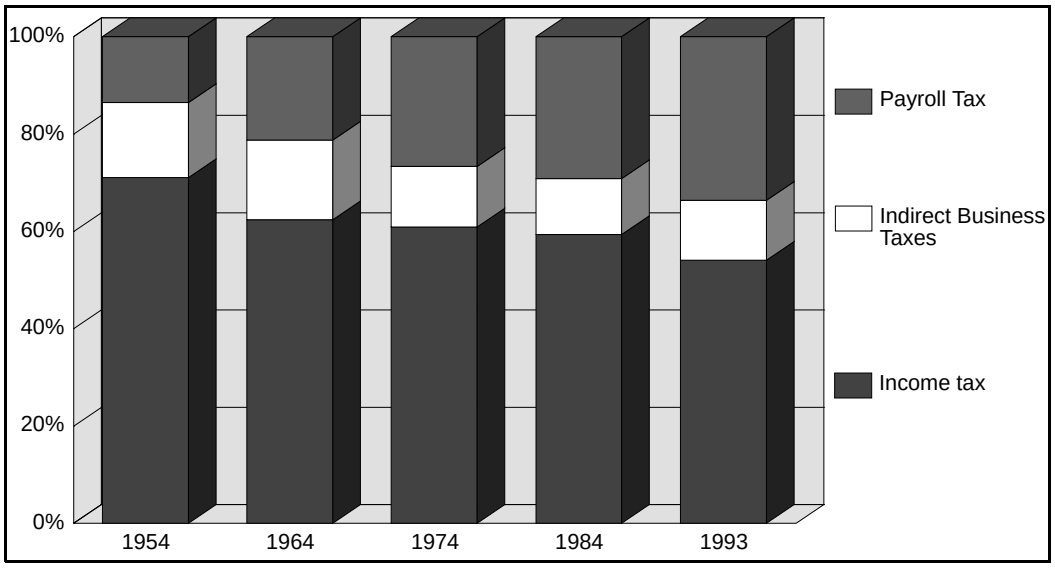


Figure 11

Composition of Marginal Tax Rate on Labor, 1954-1993

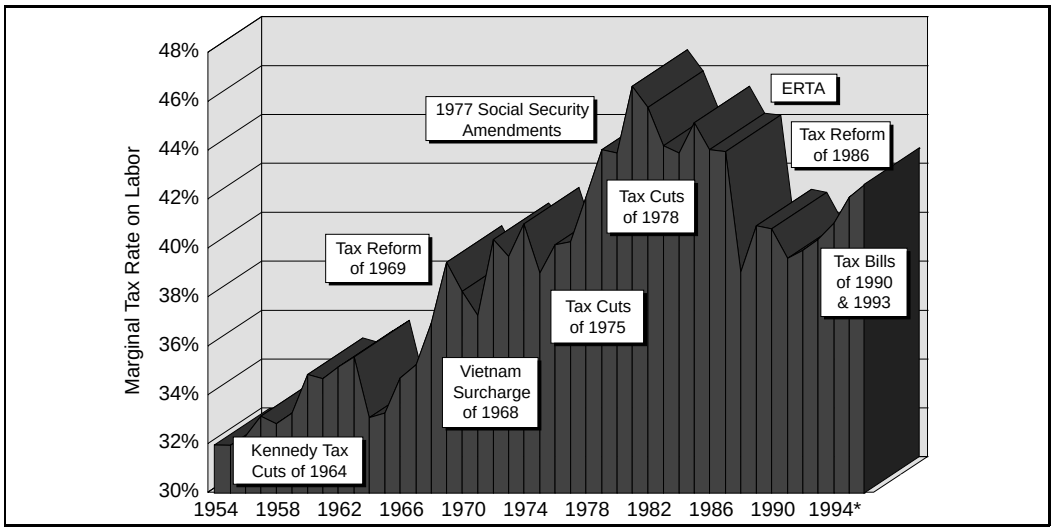
Indirect business taxes include sales, property and excise taxes, custom duties, and license and other fees.

The marginal tax rate on labor peaked in 1981 at 46.6 percent. Besides increases in payroll taxes, inflation pushed workers into higher and higher tax brackets during the 1970s. [See Figure 12.] Even tax cuts enacted in 1975 and 1978 could not check, let alone reverse, these increases. Today's labor tax rates are lower than they were during the early 1980s due to the dramatic reduction in personal income tax rates begun in 1981 and continued in 1986. Scheduled payroll tax increases in 1988 and 1990 reversed this downward trend, however. Tax increases in 1990 and 1993 mean that the marginal tax rate on labor will continue to increase to an estimated 42.6 percent by 1996.

Figure 12

Marginal Tax Rate on Labor

**Estimate*



Average and Marginal Tax Rates on Capital

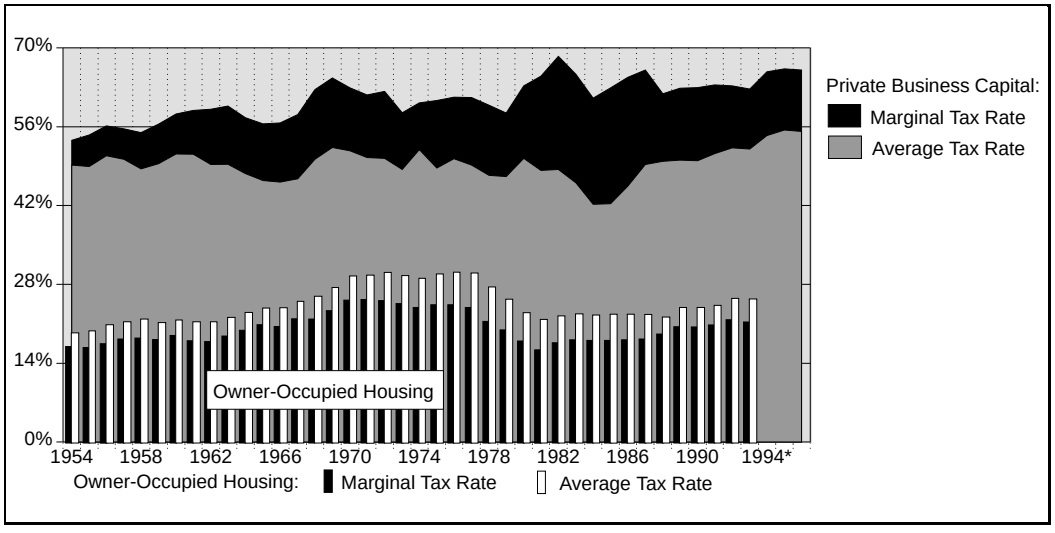
Tax rates on capital are higher than those on labor. The average tax rate on all private capital is 46.8 percent today compared to 45 percent in 1954. Although the federal government received two-thirds of the average tax on capital in 1954, today it is split roughly equally between federal and state and local governments. [See Table A-12.] In 1993, the marginal tax rate on capital was 54.6 percent compared to 48.5 percent in 1954. The federal government now receives 62 percent of the marginal tax on capital, compared to 72 percent in 1954.

Splitting capital into two components—private business capital and owner-occupied housing—shows that tax rates on assets used in production are much higher. The average tax rate on private business capital in 1993 was 52 percent and its marginal rate was 62.7 percent. [See Figure 13.] In other words, taxes claim 63 cents of each additional dollar earned from an extra unit of capital while the investor receives only 37 cents.

Figure 13

Average and Marginal Tax Rates on Private Business Capital

**Estimate*



Taxes on owner-occupied housing are much lower. In 1993, the average and marginal tax rates were 25.4 percent and 21.3 percent, respectively. The reason is the deduction for home mortgages available to taxpayers against personal income taxes. The primary tax source on homes is property taxes.

Today personal income, corporate income and indirect business taxes each account for about one-third of taxes on private business capital. [See Figure 14.] Increases in corporate income rates increase the average and marginal tax rates on capital while decreases lower them. Depreciation and other business deductions such as the investment tax credit and depletion allowances also have a substantial effect. Because a significant portion of capital income goes to individuals as dividends, interest, rent and capital gains, changes to the personal income tax also greatly affect the average and marginal tax rates on capital.

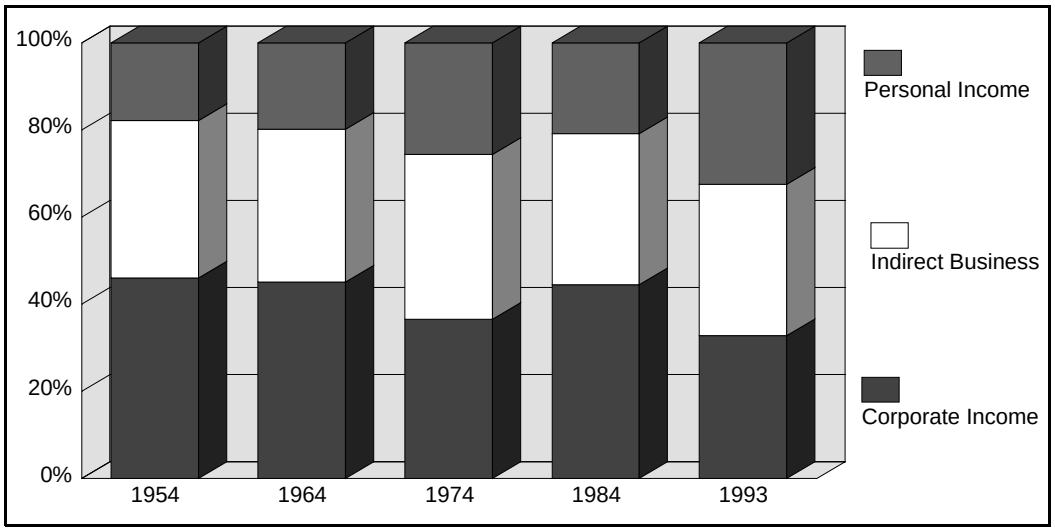


Figure 14

Composition of Marginal Tax Rate on Private Business Capital

The marginal tax rate on capital peaked in 1982 at 56.4 percent for all capital and 68.5 percent for business capital. As with labor, inflation was the primary reason behind the run up in rates during the 1970s, and the effect came about in several ways. First, inflation pushed individuals receiving income from capital into higher tax brackets. Second, inflation raised taxes on assets by lowering the value of depreciation deductions. For example, an inflation rate of 10 percent reduces the value of depreciation write-offs for a seven-year asset by 26 percent and by 80 percent for a 39-year asset. With no adjustment in depreciation deductions between 1971 and 1981, tax rates on capital continued to climb. [See Figure 15.]

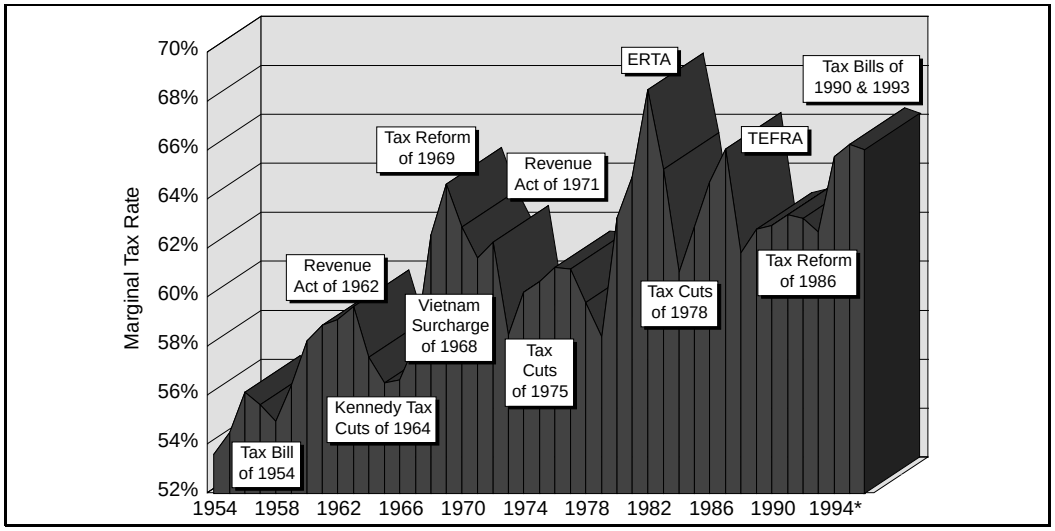


Figure 15

Marginal Tax Rate on Private Business Capital

**Estimate*

The personal tax cuts of 1981 were mainly responsible for the drop in the tax rate on capital. However, the 1982 tax bill repealed much of the depreciation relief enacted in 1981 and added new taxes on capital so that the rate went up again until 1986. While the personal and corporate rate cuts contained in tax reform lowered the marginal tax rate on capital, base-broadening measures raised it. While initially dropping from 66.1 percent in 1986 to 61.9 percent in 1987, the marginal tax rate on business capital has been increasing ever since. Personal and corporate rate increases enacted in 1990 and 1993 mean that the marginal tax rate on private business capital will continue to increase, reaching an estimated 66 percent by 1996.

Average and marginal tax rates on labor and capital have varied a great deal since 1954. The next chapter examines the economic costs from rising tax rates on the factors of production.

Chapter 4: Economic Costs of Taxing Capital and Labor

Many policy makers typically think only of taxes as providing the means to expand public sector services. What is often forgotten is that taxes directly affect the ability of an economy to produce goods and services, and that higher taxes come at the expense of private output and, therefore, growth.

Taxation transfers resources from the private to the public sector. More is at stake than the simple accounting loss from the transfer (the income effect), however. Higher (lower) taxes also affect the incentives of workers and owners of capital, reducing (increasing) their willingness to provide the inputs necessary to produce private output.

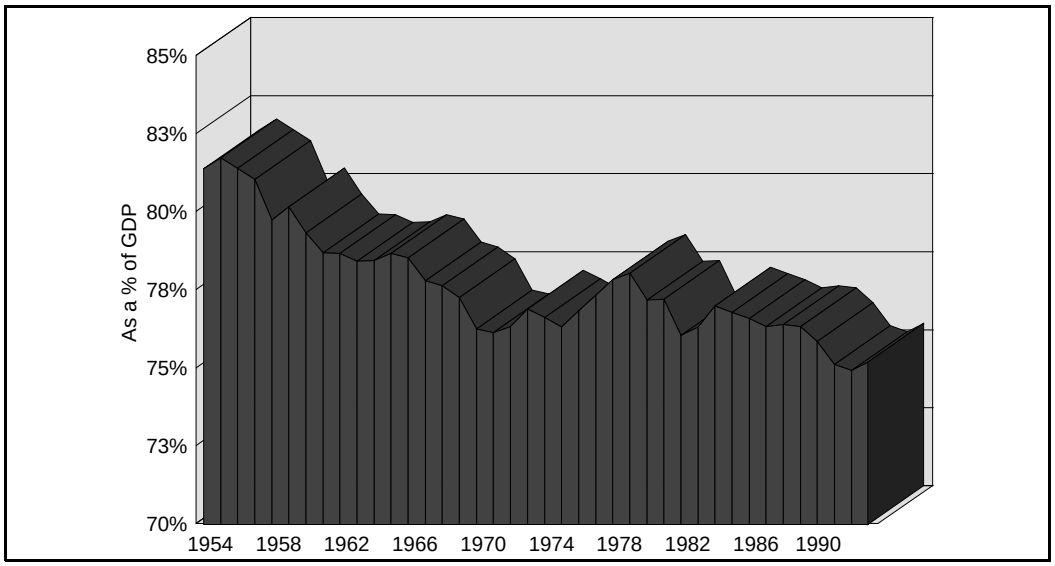


Figure 16

Private Business as a % of GDP

Private business is the engine of growth. In 1954, private business produced 81 percent of total GDP while government and government enterprises accounted for 10 percent. Output of owner-occupied housing, households and institutions made up the rest. By 1993, private business had dropped to 75 percent while government had grown to 12 percent (see Figure 16).

This chapter first describes how taxes can and have affected the growth of the U.S. economy. It then examines whether taxes can be restructured to yield a higher level of national output and higher living standards, assuming that the current level of government spending and regulation remain constant.

Taxes and Growth

Workers supply labor based on the wages they take home after taxes and inflation. Similarly, investors supply capital based on the real aftertax return they receive. Workers and investors will supply more (less) labor and capital as the aftertax returns increase (decrease).[16]

Businesses, however, demand labor and capital services based on their *total* costs. Total costs are the aftertax payments to workers and investors plus taxes. Businesses demand more (less) labor and capital as their total costs decrease (increase).

What happens if the tax rate on labor goes up? First, the gross wage rate that business must pay workers increases. Because nothing has happened to change productivity, businesses will want to hire less labor. However, with less labor in use

the existing amount of capital is less productive than before, leading business to cut back the amount of capital in service as well. Less labor and capital mean less output. A similar process occurs if the tax rate on capital goes up.

Conversely, if the tax rate on labor goes down, the gross wage rate that business must pay workers decreases, leading business to hire more labor. More labor makes the existing amount of capital more productive than before, leading business to put more capital in service as well. More labor and capital mean more output. A similar process occurs if the tax rate on capital is cut.

By efficiency we mean how much more output could the U.S. economy produce if the tax system were changed while raising the same amount of revenue.

Because we are interested in the impact of taxes at the margin, the marginal tax rate is the appropriate measure. We will use the marginal tax rates on private business capital and labor from Table A-6 to estimate the efficiency loss attributable to the current and past tax systems. By efficiency we mean how much more output could the U.S. economy produce if the tax system were changed while raising the same amount of revenue.

Efficiency loss can occur in two ways. The first results if the tax rate on one input is higher than on another input. As just discussed, business demands capital and labor based upon gross costs, that is, after the markup for taxes. A higher tax rate on one input means higher gross costs and, therefore, lower demand.

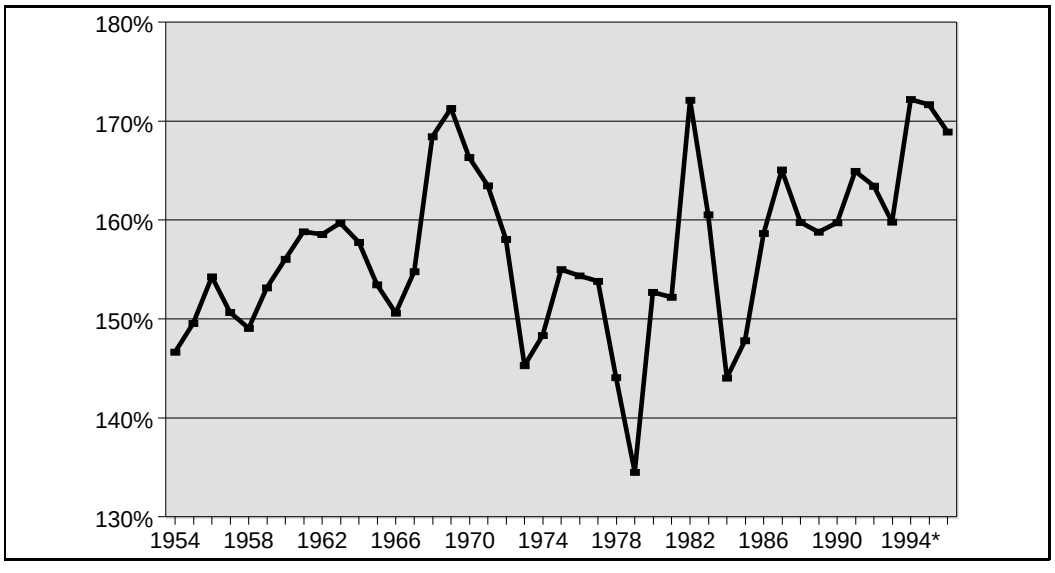
Looking back, tax rates on capital have been higher than those on labor since 1954, distorting the trade between labor and capital. For example, in 1960, it cost private business 56 percent more to add capital than labor simply because of the tax system.[17] For a time, the increasing tax on labor brought its costs closer in line with those of capital. In 1980, it cost private business only 35 percent more to add capital compared with labor. With reductions in the tax on labor during the 1980s and rising tax rates on capital, however, that trend has again reversed. Today the tax system makes capital 60 percent more expensive to expand than labor.

Without this tax distortion the economy would have used more capital. In 1960, because of higher taxes, an extra dollar of capital had to be at least 56 percent more productive than an extra dollar of labor to be put into place. With less capital, the economy produced less output; labor received a lower wage rate; and there were fewer jobs. As the differential between taxes on labor and capital narrowed, the production mix became more efficient, meaning higher output, higher wages and more jobs. [See Figure 17.]

The second efficiency loss occurs when marginal tax rates exceed average tax rates. Decisions to work, produce and invest are made based on marginal tax rates.

Figure 17

Differential Between Taxes on Labor and Taxes on Capital



Average tax rates decide the government's tax take. For any particular average tax rate, as marginal tax rates exceed that average, the economy will use less and less labor and capital, resulting in less output and lower incomes and tax revenues. The foregone output, income and taxes are deadweight losses to society.[18]

Lost Growth and Revenues

If taxes took the same share of output today as in 1954, private output would be 25.5 percent higher and GDP would be 20 percent higher.

Tables 27 and A-10 shows the effect on economic growth from these two types of efficiency losses from the U.S. tax system. The efficiency loss from increasing marginal tax rates was particularly pronounced between 1975 and 1982 primarily because of bracket creep. Because labor taxes had been increasing relative to taxes on capital, the production mix was becoming more efficient through 1987. Increased taxes on capital enacted since 1986, however, have reversed this trend.

- Today, if labor and capital were taxed to the same degree, private output would be 26 percent higher.
- If the marginal tax rates on labor and capital each equaled their average tax rates, private output would be 24.6 percent higher.
- If labor and capital were taxed the same and marginal tax rates equaled the average, output would be 48 percent higher today.
- In other words, inefficiencies in the tax system have deprived Americans of more than one-third of potential GDP.[19]

These measures assume that the total tax take was held constant for each year from 1954 on. Table A-11 shows the loss because taxes claim a larger share of the economy today than they did in 1954.

- If taxes took the same share of output today as in 1954, private output would be 25.5 percent higher and GDP would be 20 percent higher.

Table 27

Efficiency Loss Due to Tax Structure

Year	Total Efficiency Loss	Marginal Rate Higher than Average	Rate Differential between Capital and Labor
1954	32.8%	11.0%	16.2%
1964	37.1%	18.5%	19.1%
1974	38.8%	18.4%	17.7%
1984	44.4%	34.9%	16.2%

Chapter 5: Conclusions

Tax policy over the last forty years has not stayed a steady course. Sometimes mutually exclusive objectives of stimulating the economy, slowing the economy or shifting the tax burden produced policy changes that often occurred only a few years apart. What has been missing is a sense of the bigger picture. That is, how does tax policy influence economic events? With the long-term growth prospects for the U.S. looking far worse than in the past, policy makers must pay more attention to the interaction between the economy and taxes.

Unless one percentage point can be added to the U.S. growth rate, Americans will experience a lower standard of living and government will find lower-than-expected revenues and higher deficits.

First, attention should be focused on how taxes affect the costs of labor and capital. Taxes, after all, must be paid out of incomes that people earn in their capacity as either workers or investors. Because those taxes affect incentives to work and save, they ultimately affect economic activity. Second, taxes affect incentives at the margin, that is, on the next dollar earned. An examination of past tax bills shows that policies to lower tax rates or increase investment incentives lower marginal tax rates on labor and capital. Measures aimed at providing tax relief on the first dollar of income, such as raising the personal exemption or standard deduction, have almost no effect on marginal rates.

Tax rates on capital and labor are on the rise again after falling significantly during the 1980s. Coincidentally, long-term real growth prospects are now between 2 to 2.5 percent, much lower than the average 3 to 3.5 percent experienced between 1960 and 1988. Unless one percentage point can be added to the U.S. growth rate, Americans will experience a lower standard of living and government will find lower-than-expected revenues and higher deficits.

The results of this study suggest some principles that a pro-growth tax policy should follow, including:

- Labor and capital should be taxed more equally. Because capital is currently taxed at a much higher rate than labor, tax rates on capital need to be lowered.
- Marginal tax rates of labor and capital should be brought closer to their average rates. Policies that focus on the last dollar, such as lower tax rates or investment incentives, are preferable to ones that focus on the first dollar.
- Tax rates on labor and capital are too high and both should be lowered. Although the previous two principles could be accomplished while holding the total tax take the same, additional growth benefits would result by lowering the total tax burden through reducing the size of government.

Restructuring Taxes to Stimulate Growth

Currently, tax rates on capital are roughly 50 percent higher than they are on labor. The first step to stimulating growth, therefore, is to reduce tax rates on capital. Bringing tax rates on capital more in line with those on labor can be accomplished in a number of ways such as:

- Reduce the amount of capital gains included in taxable income.
- Reduce the tax rate on corporate income which falls on corporate capital. Capital owned by corporations accounts for about two-thirds of the stock of U.S. capital.
- Increase the availability of vehicles for retirement savings such as qualified pension plans, 401(k) plans and Individual Retirement Accounts. Earnings on capital held in these plans is tax-deferred which lowers the tax rate on capital.

- Liberalize tax depreciation rules to lower the effective tax rate on both corporate and noncorporate capital.

A second way to stimulate growth is to bring average and marginal tax rates closer together. Currently, economy-wide marginal tax rates on labor and capital are over one-fourth higher than their average tax rates. Narrowing this differential could be addressed in several ways including:

- Implement a flat tax rate on income and rely on exemptions and deductions to maintain progressivity.
- Eliminate special features of the income tax that magnify differentials between the marginal and average rates such as the Social Security benefits tax and the Earned Income Tax Credit.
- Minimize the effect of other programs that raise marginal tax rates on capital and labor such as the Social Security retirement earnings test and take-backs of welfare benefits as recipients begin to earn income.

Appendix I

Deriving the Tax Bases

To estimate the tax burden on labor and capital in the United States, we must first derive the appropriate bases from which taxes will be paid. Ideally, the tax base for labor is its gross product and for capital its gross product less economic depreciation. However, because of data constraints, adjustments must be made in estimation.

Table A-1 derives labor and capital tax bases for selected years. The starting points are total labor compensation and gross capital income from the Commerce Department's National and Income Product Accounts. Capital is further split into private business and owner-occupied housing. Government receives no capital income because its output is measured solely in terms of labor.[20]

Gross capital income includes the consumption of fixed capital—the government's statistical measure of economic depreciation. This measurement, however, understates depreciation because it only accounts for the physical decline in real assets. Missing is the decline in efficiency that occurs as equipment and structures age. Also neglected is the decreasing value of assets over time because they have fewer and fewer years of service left.[21]

These measures of labor compensation and gross capital income do not include indirect business taxes. Although excise and sales taxes are nominally charged to output, in fact they come out of the proceeds that would normally go to either labor or capital and must be added back.[22] To do that, we must allocate those taxes between labor and capital based upon their shares of output. As Figure 18 shows, the shares of output going to labor and capital have remained remarkably constant over time. Between 1954 and 1993, on average, labor received 68.2 percent while capital received 31.8 percent. The constancy of these shares also supports the argument that taxes on labor, even those nominally called "employer" taxes, ultimately come out of the total pay package, reducing what workers can take home in money wages or fringe benefits. Property taxes, the other major type of indirect business tax, comes solely at the expense of capital. Table A-2 summarizes the methods used to allocate other types of taxes between labor and capital.

Adding back indirect business taxes to labor and capital incomes leaves *pretax net product*, or the tax bases for labor and capital. Tax rates are computed by dividing tax amounts by the bases.

Figure 18

Shares of Output Going to Labor and Capital

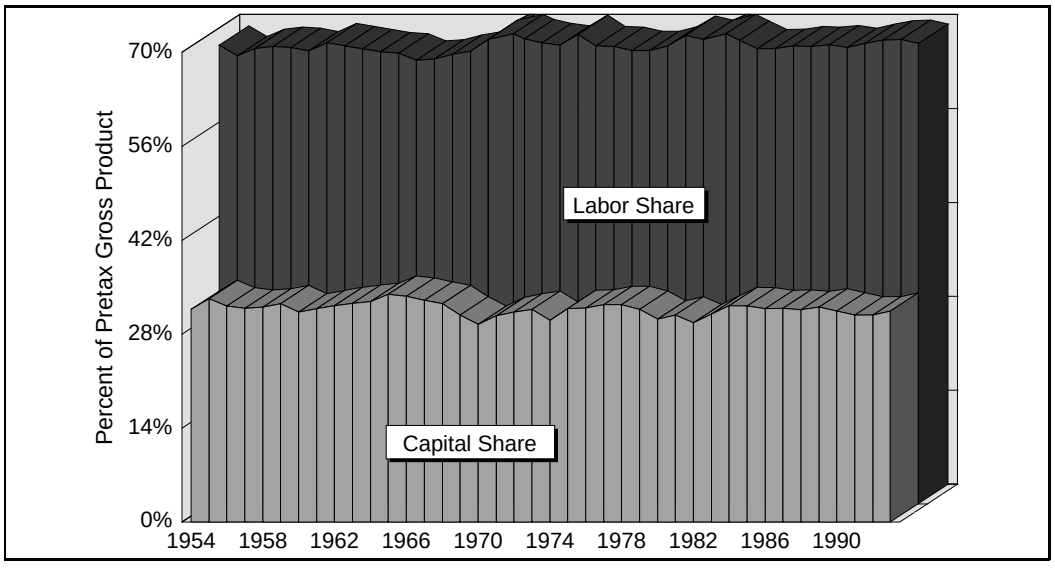


Table 28

Tax Bases for Labor and Capital, Selected Years ($billions)

	1954	1964	1974	1984	1993
Total Labor Compensation	$ 235.5	$ 406.5	$ 960.8	$ 2,414.9	$ 4,100.0
Gross Capital Income[1]	103.6	185.2	372.1	1,058.8	1,693.8
Owner-occupied housing income[2]	15.0	30.0	60.3	181.0	296.4
Private business income	88.6	155.2	311.8	877.8	1,397.4
Allocation of Taxes					
Personal tax and non-tax receipts	31.8	56.0	159.2	395.1	681.7
Labor	26.8	45.5	135.3	345.4	530.2
Capital	5.0	10.5	23.9	49.7	151.5
Private businesses	5.3	11.6	27.4	57.9	166.5
Owner-occupied housing[3]	(0.3)	(1.1)	(3.5)	(8.2)	(15.0)
Corporate profits tax accruals	17.4	26.4	46.3	78.0	158.7
Indirect business tax and nontax accruals	29.7	58.9	129.4	309.4	530.4
Labor	12.2	23.3	51.8	128.2	213.8
Capital	17.5	35.6	77.6	181.2	316.6
Private businesses	14.8	27.9	57.8	136.6	234.8
Owner-occupied housing[4]	2.7	7.7	19.8	44.6	81.8
Contributions for social insurance	10.7	30.1	110.5	325.0	585.2
All Taxes	89.6	171.4	445.4	1,107.5	1,956.0
Labor	49.7	98.9	297.6	798.6	1,329.2
Capital	39.9	72.5	147.8	308.9	626.8
Private businesses	37.5	65.9	131.5	272.5	560.0
Owner-occupied housing	2.4	6.6	16.3	36.4	66.8
Pretax Net Product[5]	336.4	596.7	1,322.1	3,349.9	5,652.9
Labor	247.7	429.8	1,012.6	2,543.1	4,313.8
Capital	88.7	166.9	309.5	806.8	1,339.1
Private business	76.3	138.2	253.4	645.3	1,075.9
Owner-occupied housing	12.4	28.7	56.1	161.5	263.2

[1] *Capital income plus the consumption of fixed capital minus income to the Federal Reserve and credit agencies.*

[2] *Gross housing product minus indirect business taxes on housing. See National Income and Product Accounts, Table 8.14.*

Table 29

Allocation of Taxes to Labor and Capital

Type of Tax	Method
Personal Income Taxes	Share of labor and capital income in adjusted gross income reported on tax returns.
Corporate Income Taxes	100% to capital
Social Insurance Contributions	100% to labor
Excise Taxes; Custom Duties	Historical shares of capital and labor in national income
Sales Taxes	Historical shares of capital and labor in national income

Appendix II: Economics of the Production Decision

Demand for Labor and Capital

Demands for labor and capital by business depend upon the productivity of inputs and their costs. Productivity is purely technical because it depends solely on physical relationships between inputs and outputs, whatever the cost of labor or capital. As more of one factor is employed, while holding all others constant, its contribution to output declines.[23] Therefore, businesses will demand less (more) of labor or capital as its cost goes up (down).

Supply of Labor and Capital

What inputs cost to hire depends upon the willingness of labor and capital to supply services. Common experience suggests that businesses must pay more to entice workers and investors to provide more capital and labor.

While workers tend to require more compensation to provide more labor services, it is not always accepted that they pay attention to taxes. This leads to an unsatisfying conclusion that the government could fool workers by changing the tax on wages without causing any adjustment in the amount of labor supplied. Although this might be true for a very short time if the tax change were small, consider the implication of workers ignoring taxes in their labor decision altogether. In this case, the government could take all wage income through taxes and return it through a general transfer to citizens without any change in work effort. How long would workers continue to work when the alternative of not working would yield them the same standard of living? A similar example could be constructed to show that if workers ignore the effects of inflation they would be left permanently worse off.

A more reasonable hypothesis is that workers provide labor services based on their take-home pay after inflation. The higher the real, aftertax wage rate, the greater is their willingness to work. Econometric studies have estimated that a 10 percent increase (decrease) in real aftertax wages causes a 2 to 4 percent increase (decrease) in the amount of labor supplied.[24] This information can be used to construct labor supply relationships around the observed levels of employment.

Similar arguments can be applied to capital supply, that is, more (less) capital is supplied as the real aftertax rate of return increases (decreases). Empirical observation has shown that the real aftertax rate of return is virtually constant over the long-term, a result consistent with a national capital market operating in an efficient, world market for capital. As rates of return in the U.S. market change, investors worldwide change their allocation of new investment to bring the real aftertax rates of return back into equilibrium. Most of this adjustment occurs after two years and all is completed within five years, implying a virtually infinite supply of capital.[25]

The investment boom of the 1980s demonstrates this strong and rapid adjustment. With the 1981 tax cuts, U.S. investors dramatically reduced their foreign investment (by 72.5 percent of the prior 5-year average by 1984), looking almost entirely to U.S. opportunities. Similarly, foreign investors greatly increased

their investment in the U.S. (by 60.4 percent of the prior 5-year average by 1984). As a result, net private foreign investment in the U.S. rose by over $100 billion annually (or roughly 15 percent of total investment) through the remainder of the 1980s.

The Production Decision

The laws of economics require that business employ additional inputs until they return exactly what they cost to hire. The gross cost of labor depends upon the real aftertax wage rate marked up for taxes faced by labor. The gross cost of capital depends upon the real aftertax rate of return to capital marked up for taxes and depreciation.

Combining capital and labor results in output. This technological relationship can be observed empirically. As previously discussed, an extremely stable relationship exists between the (pretax) costs of inputs and the value of output. Labor's gross return tends to be about 68 percent while capital's gross return is 32 percent.[26] [See Figure 18.] This stability allows us to relate the cost of labor and capital to the level of private business output over the long run.[27]

NOTES

1. Growth in the per capita standard of living is real GDP growth minus population growth. Between 1960 and 1990, the U.S. population grew at annual rate of 1.1 percent. Population is projected to grow at an annual rate of one percent between 1990 and 200 and at a rate of 0.7 percent between 2000 and 2010.
2. Historical tax amounts have been converted to 1993 dollars using the implicit GDP deflator.
3. Based on data from the U.S. Department of Commerce, National Income and Product Accounts, Personal consumption expenditures, Table 2.2.
4. Much of the historical material comes from the tax policy chapters of *Congressional Quarterly*, *Congress and the Nation*, Vols. I through VIII, Washington, DC, various years.
5. Congress and the Nation, 1945-1964, p. 416.
6. Congress and the Nation, 1945-1964, p. 400.
7. Congress and the Nation, 1945-1964, p. 399.
8. Congress and the Nation, 1945-1964, p. 434.
9. For example, the credit in any one year could not exceed $25,000 plus 25 percent of any tax liability over than amount and to $50,000 for investment in used property.
10. U.S. Department of the Treasury, *Blueprints for Basic Tax Reform*, Washington, DC: Office of the Assistant Secretary for Tax Policy, January 1977.
11. Congress and the Nation, Vol. V, 1977-1980, p. 235.
12. Congress and the Nation, Vol. V, 1977-1980, p. 239-240.
13. The reduction in individual income tax rates also lowered the tax on capital because capital income such as dividends, interest and rent are part of adjusted gross income (AGI). The bulk (85 percent) of AGI, however, is wages.
14. Components of federal and state and local taxes on labor and capital are in Appendix Tables A-13 and A-14.
15. Social Security taxes have risen steadily from 4 percent on the first $4,000 in wages in 1954 to 12.4 percent on the first $60,000 today. Medicare taxes have increased from 0.7 percent of the first $6,600 in 1966 to 2.9 percent on total wages today.
16. See Appendix II for a discussion of the demand for and supply of labor and capital and the production decision.
17. In 1960, the marginal tax on labor was 34.9 percent. A user, therefore, would have to pay 1/(1-0.349), or $1.54 to get one dollar of labor. Because the tax on capital was 58.2 percent, the user would have to pay 1/(1-0.582), or $2.40. The relative cost of capital to labor, therefore, was $2.40/$1.54, or 56 percent higher.
18. This ignores the deadweight loss from the average tax itself.
19. Private output was 77 percent of GDP in 1993. Therefore, potential GDP equals 0.77 x 0.48, or 0.37.
20. See Appendix Table A-3.
21. Economic depreciation measures loss in economic value. Accounting for the physical disappearance of assets from the stock of capital understates the true loss in economic value which falls at a geometric rate relative to physical disappearance. A complete accounting for

depreciation requires including the loss in value due to technological obsolescence and physical wear and tear. Finally, as the number of useful years remaining for an investment declines, the value of the total goods that can be produced also goes down. This means that the remaining value must decline even though the asset remains in use. The Commerce Department method ignores this loss in value, counting only the disappearance of the physical asset.

22. We adopt the convention that the impact of the tax occurs at production as each new unit of output is subject to the tax. To ascribe the tax to the consumer would lead to double counting. Measuring the impact on the consumer also would entail incorporating the reduction in the price of goods as demand is lowered.
23. Investing in a new piece of equipment yields no additional output unless some labor is also used to operate it. As more labor is used with the new equipment, output increases until additional labor begins to add less and less to total output. At some point the incremental output can even turn negative as more workers get in the way of each other. Similarly, holding the number of workers constant while expanding the number of machines stretches workers across more machines to the point where some machine would have no workers and, therefore, would produce no additional output.
24. The elasticity of labor response depends on the exact estimating method used. We have estimated the response to be about 0.3.
25. Gary Robbins and Aldona Robbins, "Capital, Taxes and Growth," Dallas, TX: National Center for Policy Analysis, NCPA Policy Report No. 105, January 1992.
26. This share relationship does vary slightly over the business cycle but returns to its long-term value. As the economy enters a downturn, businesses tend to be slow in letting employees go, temporarily pushing up labor's share. Conversely, businesses tend to be slow in rehiring labor as the economy recovers lowering labor's share.
27. This relationship is a standard Cobb-Douglas model of the production process. The optimum production efficiency in this model occurs when the labor and capital shares are constant.

Appendix III: Tabular Data

	1954	1964	1974	1984	1993
Gross Domestic Product	$ 370.9	$ 648.0	$ 1,458.6	$ 3,777.2	$ 6,377.9
Plus: ROW factor income receipts	3.1	7.4	30.3	108.1	131.7
Less: ROW factor income payments	0.9	2.4	14.6	83.8	131.6
Equals: Gross National Product	373.1	653.0	1,474.3	3,801.5	6,378.1
Less: Consumption of fixed capital[1]	32.4	53.9	140.2	433.2	671.3
Equals: Net national product	340.6	599.2	1,334.1	3,368.3	5,706.8
Less: Indirect business taxes[2]	32.9	60.1	135.7	319.5	573.6
Plus: Government enterprise subsidies	-0.8	0.1	0.4	9.5	7.0
Equals: National income	307.0	539.1	1,198.8	3,058.3	5,140.3
National Income	307.0	539.1	1,198.8	3,058.3	5,140.3
Total Labor Compensation	235.5	406.5	960.8	2,414.9	4,100.0
Compensation of employees	209.4	371.0	891.3	2,226.9	3,772.2
Compensation of self-employed[3]	26.1	35.5	69.5	188.0	327.8
Capital Income[4]	71.5	132.6	238.0	643.4	1,040.3
Further refinement of National Income					
National income	307.0	539.1	1,198.8	3,058.3	5,140.3
Compensation of labor	235.5	406.5	960.8	2,414.9	4,100.0
Capital income	71.5	132.6	238.0	643.4	1,040.3
Domestic business	263.6	451.8	967.2	2,507.9	4,166.8
Compensation of labor	194.5	324.3	744.8	1,889.0	3,126.7
Capital income	69.1	127.5	222.4	618.9	1,040.1
Corporate business	167.4	308.1	695.8	1,832.7	2,996.9
Compensation of labor	132.4	239.5	589.5	1,511.2	2,460.2
Capital income	35.0	68.6	106.3	321.5	536.7
Government enterprises	3.6	7.1	19.1	45.7	78.2
Compensation of labor	3.6	7.1	19.1	45.7	78.2
Capital income	0.0	0.0	0.0	0.0	0.0
Noncorporate business	92.6	136.6	252.3	629.5	1,091.7
Compensation of labor	58.5	77.7	136.2	332.1	588.3
Capital income	34.1	58.9	116.1	297.4	503.4
Households and institutions	8.1	17.9	47.2	132.0	286.3
Compensation of labor	8.1	17.9	47.2	132.0	286.3
Capital income	0.0	0.0	0.0	0.0	0.0
General government	33.0	64.4	168.8	394.1	687.1
Compensation of labor	33.0	64.4	168.8	394.1	687.1
Capital income	0.0	0.0	0.0	0.0	0.0
Rest of the world	2.2	5.0	15.7	24.3	0.1
Compensation of labor	-0.1	-0.1	0.0	-0.2	-0.1

Table A-3

GDP, Net GDP and National Income, Selected Years ($ billions)

[1]*Capital consumption allowance and adjustment to straight-line depreciation.*
[2]*Also includes indirect business nontax liability, business transfer payments and statistical discrepancy.*
[3]*The average wage rate for the self-employed is assumed to be the same as that for employees in the same sector.*
[4]*Difference between national income and labor compensation.*

Source: U.S. Dept. of Commerce, National Income and Product Accounts, Tables 1.9, 1.15, 6.2, 6.4, 6.7 and 8.18.

Table A-4

Federal, State and Local Taxes, 1954-1993

Year	As a Percent of GDP			In Billions of $1993		
	Federal	State & Local	Total	Federal	State & Local	Total
1954	17.3%	6.9%	24.1%	$ 356.8	$ 142.2	$ 499.0
1955	18.0%	6.9%	24.9%	393.9	150.2	544.1
1956	18.3%	7.2%	25.6%	408.3	161.0	569.3
1957	18.3%	7.4%	25.7%	415.1	168.1	583.2
1958	17.4%	7.7%	25.1%	392.1	174.4	566.5
1959	18.2%	7.7%	25.9%	433.5	184.2	617.7
1960	18.7%	8.1%	26.9%	455.8	198.3	654.1
1961	18.4%	8.5%	26.9%	461.2	212.5	673.7
1962	18.6%	8.5%	27.1%	488.5	223.5	712.0
1963	19.0%	8.6%	27.6%	519.2	236.0	755.2
1964	17.7%	8.8%	26.5%	513.2	253.0	766.2
1965	17.7%	8.7%	26.4%	540.3	265.8	806.1
1966	18.4%	8.7%	27.1%	594.9	281.7	876.7
1967	18.5%	9.1%	27.6%	613.1	301.1	914.2
1968	19.6%	9.5%	29.0%	676.9	326.8	1,003.6
1969	20.5%	9.8%	30.3%	726.5	349.6	1,076.1
1970	19.0%	10.3%	29.3%	673.1	367.4	1,040.5
1971	18.2%	10.6%	28.8%	663.0	387.1	1050.1
1972	18.9%	11.0%	29.9%	727.0	420.4	1,147.4
1973	19.2%	10.7%	29.9%	774.9	433.0	1,207.9
1974	19.7%	10.7%	30.5%	792.0	431.1	1,223.2
1975	18.2%	10.8%	29.0%	725.1	429.2	1,154.2
1976	18.9%	10.9%	29.8%	788.2	455.4	1,243.5
1977	19.1%	10.9%	30.0%	834.7	474.1	1,308.8
1978	19.4%	10.4%	29.8%	887.3	475.4	1,362.8
1979	20.9%	10.0%	29.9%	932.1	471.4	1,403.5
1980	20.0%	10.1%	30.0%	931.0	469.8	1,400.8
1981	20.6%	10.0%	30.6%	977.0	474.5	1,451.5
1982	19.6%	10.3%	30.0%	912.4	479.5	1,391.9
1983	18.9%	10.5%	29.4%	913.1	505.2	1,418.3
1984	18.7%	10.5%	29.3%	960.7	539.8	1,500.4
1985	19.1%	10.6%	29.7%	1,010.2	560.9	1,571.0
1986	19.0%	10.9%	29.9%	1,034.7	591.0	1,625.7
1987	19.8%	10.8%	30.6%	1,108.8	607.2	1,716.0
1988	19.5%	10.6%	30.1%	1,133.9	618.6	1,752.5
1989	19.7%	10.7%	30.5%	1,180.4	641.2	1,821.6

Table A-5

Average Tax Rates on U.S. Labor and Capital, 1954-1996

	Total	Labor	Capital	Private Business	Owner-occupied housing
1954	26.6%	20.1%	45.0%	49.2%	19.4%
1955	27.3%	20.4%	45.1%	48.9%	19.7%
1956	27.8%	20.9%	46.6%	50.8%	20.8%
1957	28.0%	21.6%	45.8%	50.2%	21.3%
1958	27.5%	21.5%	44.1%	48.5%	21.8%
1959	28.3%	22.2%	44.9%	49.4%	21.2%
1960	29.3%	23.4%	46.0%	51.2%	21.7%
1961	29.4%	23.4%	45.8%	51.1%	21.4%
1962	29.5%	23.9%	44.4%	49.3%	21.3%
1963	30.0%	24.4%	44.6%	49.3%	22.1%
1964	28.7%	23.0%	43.4%	47.7%	23.0%
1965	28.7%	22.9%	42.7%	46.4%	23.8%
1966	29.5%	24.4%	42.5%	46.2%	23.9%
1967	30.0%	25.0%	43.1%	46.8%	25.0%
1968	31.6%	26.2%	46.2%	50.2%	25.9%
1969	33.0%	28.0%	48.0%	52.3%	27.4%
1970	32.1%	27.3%	47.5%	51.7%	29.5%
1971	31.6%	26.6%	46.7%	50.5%	29.7%
1972	32.8%	28.1%	46.9%	50.4%	30.1%
1973	32.7%	28.4%	45.3%	48.4%	29.6%
1974	33.7%	29.4%	47.8%	51.9%	29.1%
1975	32.4%	28.4%	45.3%	48.6%	29.9%
1976	33.3%	29.0%	46.9%	50.3%	30.2%
1977	33.5%	29.4%	46.1%	49.2%	30.0%
1978	33.3%	29.8%	44.2%	47.4%	27.5%
1979	33.6%	30.6%	43.4%	47.1%	25.3%
1980	33.9%	30.9%	44.8%	50.4%	23.0%
1981	34.8%	32.5%	42.8%	48.3%	21.8%
1982	34.2%	32.1%	42.2%	48.4%	22.4%
1983	33.6%	31.5%	40.8%	46.0%	22.8%
1984	33.1%	31.4%	38.3%	42.2%	22.5%
1985	33.5%	31.9%	38.4%	42.3%	22.7%
1986	33.8%	31.6%	40.8%	45.4%	22.7%
1987	34.3%	31.3%	43.8%	49.3%	22.6%
1988	33.8%	30.5%	44.2%	49.9%	22.2%
1989	34.5%	31.2%	44.8%	50.1%	23.9%
1990	34.3%	31.2%	44.5%	50.0%	23.9%

Table A-6

Marginal Tax Rates on U.S. Labor and Capital, 1954-1996

[1]Includes the economy-wide marginal tax rates on personal income.

[2]Includes the economy-wide marginal tax rates on personal and corporate income.

	Total	Labor[1]	Capital[2]	Private Business	Owner-occupied housing
1954	36.3%	32.0%	48.5%	53.6%	16.9%
1955	36.9%	32.0%	49.5%	54.5%	16.8%
1956	37.3%	32.3%	50.7%	56.1%	17.4%
1957	37.6%	33.1%	50.0%	55.6%	18.3%
1958	37.1%	32.8%	49.0%	55.0%	18.4%
1959	37.9%	33.3%	50.3%	56.4%	18.2%
1960	39.2%	34.9%	51.3%	58.2%	18.9%
1961	39.2%	34.7%	51.5%	58.9%	17.9%
1962	39.7%	35.2%	51.9%	59.1%	17.8%
1963	40.3%	35.6%	52.5%	59.7%	18.8%
1964	38.1%	33.1%	51.1%	57.6%	19.9%
1965	38.3%	33.3%	50.7%	56.5%	20.8%
1966	39.3%	34.7%	50.8%	56.6%	20.5%
1967	39.9%	35.3%	52.1%	58.2%	21.8%
968	42.0%	37.0%	55.8%	62.6%	21.8%
1969	44.0%	39.4%	57.4%	64.6%	23.3%
1970	42.4%	38.3%	55.7%	62.9%	25.2%
1971	41.6%	37.3%	54.9%	61.6%	25.3%
1972	44.2%	40.4%	55.8%	62.3%	25.1%
1973	43.0%	39.7%	52.9%	58.5%	24.6%
1974	44.0%	41.0%	53.6%	60.2%	23.9%
1975	42.7%	39.0%	54.3%	60.7%	24.4%
1976	43.7%	40.2%	54.9%	61.2%	24.3%
1977	43.9%	40.3%	55.2%	61.2%	23.9%
1978	44.9%	42.1%	53.6%	59.8%	21.4%
1979	45.9%	44.1%	51.8%	58.4%	19.9%
1980	46.2%	43.9%	54.1%	63.3%	17.9%
1981	48.5%	46.6%	54.8%	64.9%	16.4%
1982	48.0%	45.8%	56.4%	68.5%	17.6%
1983	46.6%	44.2%	54.8%	65.3%	18.1%
1984	46.0%	43.9%	52.4%	61.1%	18.0%
1985	47.3%	45.2%	53.9%	62.9%	18.0%
1986	46.7%	44.1%	55.2%	64.7%	18.1%
1987	46.9%	44.0%	56.3%	66.1%	18.3%
1988	42.4%	39.1%	53.1%	61.9%	19.2%
1989	44.2%	40.9%	54.4%	62.8%	20.5%
1990	43.9%	40.8%	54.1%	63.0%	20.4%

Table A-7

Components of Average & Marginal Tax Rates

	1954	1964	1974	1984	1993
Average Tax Rate on Labor					
Personal Taxes	53.9%	46.0%	45.5%	43.3%	39.9%
Corporate Profits Tax	0.0%	0.0%	0.0%	0.0%	0.0%
Indirect Business Taxes	24.5%	23.6%	17.4%	16.1%	16.1%
Social Insurance Contributions	21.5%	30.4%	37.1%	40.7%	44.0%
Marginal Tax Rate on Labor					
Personal Taxes	71.1%	62.4%	60.9%	59.4%	54.1%
Corporate Profits Tax	0.0%	0.0%	0.0%	0.0%	0.0%
Indirect Business Taxes	15.4%	16.4%	12.5%	11.5%	12.3%
Social Insurance Contributions	13.5%	21.2%	26.6%	29.1%	33.6%
Average Tax Rate on Capital					
Personal Taxes	12.5%	14.5%	16.2%	16.1%	24.2%
Corporate Profits Tax	43.6%	36.4%	31.3%	25.3%	25.3%
Indirect Business Taxes	43.9%	49.1%	52.5%	58.7%	50.5%
Social Insurance Contributions	0.0%	0.0%	0.0%	0.0%	0.0%
Marginal Tax Rate on Capital					
Personal Taxes	15.6%	16.2%	19.6%	15.7%	26.4%
Corporate Profits Tax	43.7%	42.1%	33.6%	41.5%	30.3%
Indirect Business Taxes	40.7%	41.7%	46.7%	42.8%	43.3%
Social Insurance Contributions	0.0%	0.0%	0.0%	0.0%	0.0%
Average Tax Rate on Private Business Capital					
Personal Taxes	14.1%	17.6%	20.8%	21.2%	29.7%
Corporate Profits Tax	46.4%	40.1%	35.2%	28.6%	28.3%
Indirect Business Taxes	39.5%	42.3%	44.0%	50.1%	41.9%
Social Insurance Contributions	0.0%	0.0%	0.0%	0.0%	0.0%
Marginal Tax Rate on Private Business Capital					
Personal Taxes	17.8%	19.8%	25.6%	20.8%	32.4%
Corporate Profits Tax	46.0%	45.1%	36.6%	44.5%	32.8%
Indirect Business Taxes	36.2%	35.1%	37.9%	34.7%	34.8%
Social Insurance Contributions	0.0%	0.0%	0.0%	0.0%	0.0%
Average Tax Rate on Owner-Occupied Housing					
Personal Taxes	-12.5%	-16.7%	-21.5%	-22.5%	-22.5%
Corporate Profits Tax	0.0%	0.0%	0.0%	0.0%	0.0%
Indirect Business Taxes	112.5%	116.7%	121.5%	122.5%	122.5%
Social Insurance Contributions	0.0%	0.0%	0.0%	0.0%	0.0%

Table A-8

Federal, State & Local Receipts by Type, Selected Years ($ billions)

	1954	1964	1974	1984	1993
Federal Receipts	$ 64.3	$ 116.2	$ 294.0	$ 725.8	$ 1,269.5
Personal tax and nontax receipts	29.0	48.4	130.9	308.0	521.3
Income taxes	28.0	45.8	126.0	301.5	506.7
Estate and gift taxes	0.9	2.6	4.8	6.0	13.0
Nontaxes	0.1	0.1	0.1	0.5	1.6
Corporate profits tax accruals	16.9	26.1	45.1	75.2	143.1
Federal Reserve banks	0.3	1.6	5.6	16.1	12.9
Other	16.6	24.6	39.6	59.2	127.7
Indirect business tax and nontax accruals	9.8	16.3	22.1	57.8	87.3
Excise taxes	9.0	14.2	16.5	36.3	50.3
Customs duties	0.5	1.3	3.7	11.9	19.8
Nontaxes	0.2	0.8	1.9	9.6	17.2
Contributions for social insurance	8.7	25.4	95.9	284.8	517.8
State & Local Receipts	28.4	67.1	200.6	492.2	888.1
Personal tax and nontax receipts	2.8	7.5	28.2	87.1	160.3
Income taxes	1.1	4.0	20.4	67.5	120.8
Nontaxes	0.5	0.7	2.2	8.7	19.7
Other	1.2	2.8	5.7	10.9	19.9
Corporate profits tax accrual	0.8	1.8	6.7	18.8	31.0
Indirect business tax and nontax accruals	19.9	42.6	107.2	251.7	443.1
Sales taxes	6.5	16.5	48.2	121.1	211.7
Property taxes	9.7	21.7	49.0	99.7	186.9
Other	3.8	4.4	10.1	30.8	44.5
Contributions for social insurance	2.0	4.7	14.6	40.2	67.4
Federal grants-in-aid	2.9	10.4	43.9	94.4	186.2
All Government Taxes	89.9	173.0	451.0	1,123.6	1,968.9
Personal tax and nontax receipts	31.8	56.0	159.2	395.1	681.7
Income taxes	29.1	49.8	146.4	369.0	627.5
Estate and gift taxes	0.9	2.6	4.8	6.0	13.0
Nontaxes	0.6	0.8	2.3	9.2	21.3
Other	1.2	2.8	5.7	10.9	19.9
Corporate profits tax accruals	17.7	28.0	51.9	94.1	171.6
Federal Reserve banks	0.3	1.6	5.6	16.1	12.9
Other	17.4	26.4	46.3	78.0	158.7
Indirect business tax and nontax accruals	29.7	58.9	129.4	309.4	530.4

Table A-8
(cont.)

	1954	1964	1974	1984	1993
More Detail on Indirect Business Tax and Nontax Accruals	**$ 29.7**	**$ 58.8**	**$ 129.3**	**$ 309.5**	**$ 530.4**
Federal	9.8	16.3	22.1	57.8	87.3
Excise Taxes	9.0	14.2	16.5	36.3	50.3
Liquor	2.6	3.6	5.3	5.3	8.6
Tobacco	1.5	2.1	2.3	4.7	5.4
Windfall Profit Tax	0.0	0.0	0.0	8.3	0.0
Other	4.8	8.5	8.9	18.0	36.3
Customs Duties	0.5	1.3	3.7	11.9	19.8
Nontaxes	0.2	0.8	1.9	9.6	17.2
Outer Continental Shelf Royalties	0.0	0.1	0.5	3.9	2.4
Deposit insurance premiums	0.1	0.2	0.4	2.0	7.6
Other[1]	0.0	0.5	0.9	3.8	7.2
State and Local	19.9	42.6	107.2	251.7	443.1
Sales Taxes	6.5	16.5	48.2	121.1	211.7
State	5.8	14.5	42.0	101.0	176.0
General	2.6	6.4	23.9	66.6	117.0
Gasoline	2.3	4.2	8.1	12.9	24.0
Liquor	0.5	0.9	2.0	3.0	3.8
Tobacco	0.5	1.2	3.3	4.2	6.6
Public Utilities	0.0	0.5	1.5	5.9	8.3
Insurance receipts	0.0	0.7	1.7	4.2	8.2
Other	0.0	0.6	1.5	4.1	8.1
Local	0.7	1.9	6.1	20.1	35.7
General	0.4	1.2	4.1	14.0	24.6
Public utilities	0.1	0.4	1.3	3.8	6.2
Other	0.2	0.4	0.8	2.3	4.9
Property Taxes	9.7	21.7	49.0	99.7	186.9
Motor vehicle licenses	0.6	0.9	1.5	2.3	3.9
Severance taxes	0.0	0.5	1.6	7.3	5.1
Other taxes[2]	2.3	1.8	3.8	10.1	18.7
Nontaxes	0.9	1.3	3.2	11.1	16.8
Rents and royalties	0.3	0.4	1.3	4.9	5.4
Special assessments	0.4	0.5	0.8	2.0	2.7
Fines	0.1	0.1	0.3	1.5	2.8

Table A-9

Federal, State & Local Taxes Per Capita and as a Percent of Income[1]

[1]National income plus indirect business taxes

Year	In Billions of $1993			As a Percent of Per Capita Income[1]		
	Federal	State & Local	Total	Federal	State & Local	Total
1954	$2,197	$ 875	$3,073	19.0%	7.6%	26.6%
1955	2,383	909	3,292	19.8%	7.5%	27.3%
1956	2,428	957	3,385	19.9%	7.9%	27.8%
1957	2,423	981	3,404	20.0%	8.1%	28.1%
1958	2,252	1,002	3,254	19.1%	8.5%	27.5%
1959	2,448	1,040	3,488	19.9%	8.5%	28.4%
1960	2,521	1,097	3,618	20.4%	8.9%	29.3%
1961	2,511	11,57	3,668	20.1%	9.3%	29.4%
1962	2,618	11,98	3,816	20.2%	9.3%	29.5%
1963	2,743	1,247	3,990	20.6%	9.4%	30.0%
1964	2,674	1,318	3,993	19.3%	9.5%	28.8%
1965	2,781	1,368	4,149	19.2%	9.4%	28.6%
1966	3,026	1,433	4,459	20.0%	9.5%	29.5%
1967	3,084	1,514	4,598	20.1%	9.9%	30.0%
1968	3,372	1,628	5,001	21.3%	10.3%	31.6%
1969	3,584	1,725	5,309	22.3%	10.7%	33.0%
1970	3,282	1,792	5,073	20.7%	11.3%	32.1%
1971	3,192	1,864	5,056	19.9%	11.6%	31.6%
1972	3,464	2,003	5,467	20.8%	12.0%	32.8%
1973	3,657	2,043	5,700	21.0%	11.7%	32.7%
1974	3,703	2,015	5,718	21.8%	11.9%	33.6%
1975	3,357	1,987	5,344	20.4%	12.0%	32.4%
1976	3,614	2,088	5,702	21.1%	12.2%	33.3%
1977	3,789	2,152	5,941	21.4%	12.1%	33.5%
1978	3,986	2,136	6,122	21.7%	11.6%	33.3%
1979	4,141	2,094	6,235	22.3%	11.3%	33.6%
1980	4,089	2,063	6,152	22.5%	11.4%	33.9%
1981	4,248	2,063	6,311	23.4%	11.4%	34.7%
1982	3,929	2,065	5,995	22.4%	11.8%	34.2%
1983	3,897	2,156	6,053	21.6%	11.9%	33.5%
1984	4,064	2,283	6,347	21.1%	11.9%	33.0%
1985	4,235	2,352	6,587	21.5%	12.0%	33.5%
1986	4,299	2,455	6,754	21.5%	12.3%	33.8%
1987	4,565	2,500	7,065	22.2%	12.2%	34.4%
1988	4,626	2,524	7,150	21.8%	11.9%	33.7%
1989	4,771	2,592	7,363	22.3%	12.1%	34.5%

Table A-10

Efficiency Loss Due to Tax Structure

	Total Efficiency Loss[1]	Marginal Rate Higher than Average[2]	Rate Differential between Capital & Labor[3]
1954	32.8%	11.0%	16.2%
1955	33.2%	12.4%	16.4%
1956	35.5%	12.3%	18.5%
1957	34.7%	12.5%	17.6%
1958	34.3%	13.7%	17.0%
1959	35.7%	14.6%	18.1%
1960	38.3%	15.4%	19.5%
1961	39.1%	16.5%	20.2%
1962	39.8%	19.6%	19.7%
1963	40.4%	20.4%	19.9%
1964	37.1%	18.5%	19.1%
1965	35.4%	18.5%	17.3%
1966	35.0%	19.2%	16.5%
1967	37.5%	21.0%	18.2%
1968	44.9%	24.6%	22.7%
1969	49.0%	26.3%	24.7%
1970	46.0%	23.2%	23.9%
1971	43.3%	22.3%	22.3%
1972	44.7%	24.9%	20.3%
1973	36.4%	20.1%	15.8%
1974	38.8%	18.4%	17.7%
1975	41.0%	23.3%	19.7%
1976	41.3%	22.3%	19.4%
1977	41.0%	23.8%	19.0%
1978	39.8%	24.8%	15.7%
1979	37.7%	23.4%	12.8%
1980	47.2%	27.8%	20.1%
1981	51.9%	35.9%	19.9%
1982	62.7%	44.3%	28.1%
1983	53.6%	39.0%	23.0%
1984	44.4%	34.9%	16.2%
1985	48.8%	39.4%	17.5%
1986	51.6%	38.4%	21.5%
1987	53.4%	35.6%	23.6%
1988	40.4%	22.8%	21.8%
1989	42.6%	25.1%	21.3%
1990	43.2%	25.5%	21.9%

[1]Total annual percent reduction in private business output. In 1993, private business output equaled 75% of GDP.

[2]Annual percent reduction in private business output because the marginal tax rates on capital and labor are higher than their respective averages.

[3]Annual percent reduction in private business output because capital is taxed more heavily than labor.

Table A-11

Losses Due to Growth in Taxes

[1]*Annual percent reduction in private business output because taxes as a share of the economy is larger than it was in 1954. In 1993, private business output equaled 75 percent of GDP.*

	Loss Due to Growth in Taxes[1]	Incremental Loss in Long-Run Growth
1954	0.0%	
1955	1.2%	1.2%
1956	3.6%	2.4%
1957	3.3%	-0.4%
1958	2.2%	-1.0%
1959	4.5%	2.2%
1960	8.0%	3.4%
1961	8.9%	0.8%
1962	9.5%	0.6%
1963	10.6%	1.0%
1964	6.1%	-4.1%
1965	4.6%	-1.4%
1966	5.5%	0.8%
1967	8.1%	2.5%
1968	16.5%	7.8%
1969	22.1%	4.8%
1970	17.9%	-3.5%
1971	14.9%	-2.5%
1972	17.9%	2.6%
1973	10.9%	-6.0%
1974	14.6%	3.3%
1975	14.2%	-0.4%
1976	15.9%	1.5%
1977	15.8%	0.0%
1978	14.5%	-1.2%
1979	13.3%	-1.0%
1980	22.1%	7.7%
1981	27.5%	4.4%
1982	35.4%	6.2%
1983	26.5%	-6.6%
1984	17.8%	-6.8%
1985	22.1%	3.7%
1986	25.2%	2.5%
1987	28.1%	2.3%
1988	16.4%	-9.2%
1989	19.3%	2.5%
1990	19.5%	0.2%

Table A-12

Share of Average and Marginal Tax Rates on Labor and Capital Accounted for by Federal Taxes

Year	Average Tax Rates:			Marginal Tax Rates		
	Private Output	Private Labor	Private Capital	Private Output	Private Labor	Private Capital
1954	76.6%	82.5%	68.2%	82.6%	88.0%	72.2%
1955	77.6%	82.8%	70.3%	83.3%	88.0%	74.7%
1956	77.1%	82.4%	69.6%	82.8%	87.5%	74.0%
1957	76.5%	82.4%	68.1%	82.5%	87.5%	72.9%
1958	74.7%	81.2%	65.3%	81.5%	86.6%	71.5%
1959	75.7%	81.2%	67.7%	82.0%	86.3%	74.0%
1960	75.1%	81.2%	66.1%	81.6%	86.1%	72.7%
1961	74.2%	80.3%	65.1%	80.8%	85.3%	72.2%
1962	74.0%	80.6%	64.0%	81.0%	85.3%	72.9%
1963	74.4%	80.8%	64.8%	81.4%	85.4%	73.8%
1964	72.4%	78.8%	63.0%	79.5%	83.5%	72.1%
1965	72.4%	78.6%	63.3%	79.5%	83.6%	72.3%
1966	73.1%	79.2%	63.4%	79.9%	83.7%	72.7%
1967	72.0%	79.1%	60.5%	79.1	83.4%	70.7%
1968	72.5%	78.9%	61.8%	79.4%	83.2%	71.9%
1969	72.2%	78.8%	60.2%	79.1%	83.1%	70.3%
1970	69.1%	77.2%	53.8%	76.3%	81.6%	64.3%
1971	67.5%	75.7%	52.8%	74.8%	80.1%	63.3%
1972	67.5%	75.3%	52.8%	74.8%	79.8%	63.6%
1973	68.0%	75.8%	53.3%	74.5%	79.7%	62.8%
1974	68.8%	76.3%	53.3%	74.9%	80.2%	61.4%
1975	66.6%	75.0%	49.6%	73.5%	78.8%	61.1%
1976	67.3%	75.0%	52.0%	73.8%	78.8%	62.0%
1977	67.6%	75.1%	52.6%	74.1%	78.8%	63.2%
1978	68.8%	75.6%	54.6%	75.5%	79.5%	65.5%
1979	69.9%	76.6%	54.8%	76.5%	80.6%	65.1%
1980	70.4%	76.8%	54.7%	76.9%	80.7%	66.2%
1981	71.0%	78.0%	52.6%	78.0%	81.7%	67.0%
1982	69.1%	77.1%	45.8%	76.5%	80.8%	63.3%
1983	67.8%	76.0%	45.8%	75.2%	79.5%	63.3%
1984	67.2%	75.5%	46.0%	74.6%	78.8%	63.5%
1985	67.3%	75.8%	45.4%	75.0%	79.3%	63.8%
1986	66.9%	75.2%	46.5%	74.3%	78.5%	63.3%
1987	68.4%	75.4%	52.7%	75.3%	78.8%	66.5%
1988	68.8%	75.4%	54.1%	73.9%	78.0%	64.3%

Table A-13

Average and Marginal Tax Rates on Labor and Capital Due to Federal Taxes

Year	Average Tax Rates:			Marginal Tax Rates:		
	Private Output	Private Labor	Private Capital	Private Output	Private Labor	Private Capital
1954	20.4%	16.6%	30.7%	30.0%	28.1%	35.0%
1955	21.2%	16.9%	31.7%	30.7%	28.1%	37.0%
1956	21.4%	17.3%	32.4%	30.8%	28.3%	37.5%
1957	21.5%	17.8%	31.2%	31.0%	29.0%	36.4%
1958	20.5%	17.5%	28.8%	30.2%	28.4%	35.0%
1959	21.4%	18.0%	30.4%	31.1%	28.7%	37.2%
1960	22.0%	19.0%	30.4%	32.0%	30.0%	37.3%
1961	21.8%	18.8%	29.8%	31.7%	29.6%	37.2%
1962	21.9%	19.3%	28.4%	32.2%	30.0%	37.8%
1963	22.3%	19.7%	28.9%	32.8%	30.4%	38.7%
1964	20.8%	18.1%	27.3%	30.3%	27.6%	36.8%
1965	20.7%	18.0%	27.0%	30.5%	27.8%	36.6%
1966	21.6%	19.3%	27.0%	31.4%	29.1%	36.9%
1967	21.6%	19.8%	26.1%	31.5%	29.4%	36.8%
1968	22.9%	20.7%	28.5%	33.4%	30.7%	40.1%
1969	23.9%	22.0%	28.9%	34.8%	32.8%	40.3%
1970	22.2%	21.0%	25.5%	32.4%	31.2%	35.8%
1971	21.3%	20.1%	24.6%	31.1%	29.9%	34.8%
1972	22.1%	21.2%	24.8%	33.1%	32.2%	35.5%
1973	22.2%	21.6%	24.1%	32.1%	31.6%	33.2%
1974	23.2%	22.4%	25.5%	32.9%	32.9%	33.0%
1975	21.6%	21.3%	22.5%	31.4%	30.8%	33.2%
1976	22.4%	21.7%	24.4%	32.3%	31.7%	34.1%
1977	22.7%	22.1%	24.3%	32.6%	31.7%	34.8%
1978	22.9%	22.5%	24.1%	33.9%	33.5%	35.2%
1979	23.5%	23.4%	23.8%	35.1%	35.5%	33.8%
1980	23.9%	23.7%	24.5%	35.5%	35.4%	35.8%
1981	24.7%	25.4%	22.5%	37.8%	38.1%	36.8%
1982	23.7%	24.8%	19.3%	36.7%	37.0%	35.7%
1983	22.8%	23.9%	18.7%	35.0%	35.1%	34.7%
1984	22.2%	23.7%	17.6%	34.3%	34.6%	33.3%
1985	22.5%	24.2%	17.4%	35.4%	35.8%	34.4%
1986	22.6%	23.8%	18.9%	34.7%	34.6%	34.9%
1987	23.5%	23.6%	23.1%	35.3%	34.7%	37.4%
1988	23.2%	23.0%	23.9%	31.4%	30.4%	34.2%

Table A-14

Average and Marginal Tax Rates on Labor and Capital Due to State and Local Taxes

Year	Average Tax Rates:			Marginal Tax Rates:		
	Private Output	Private Labor	Private Capital	Private Output	Private Labor	Private Capital
1954	7.6%	3.5%	18.5%	7.9%	3.8%	18.6%
1955	7.5%	3.5%	17.3%	7.8%	3.8%	17.5%
1956	7.8%	3.7%	18.4%	8.1%	4.0%	18.6%
1957	7.9%	3.8%	19.0%	8.2%	4.1%	19.2%
1958	8.3%	4.0%	19.7%	8.6%	4.4%	19.9%
1959	8.3%	4.2%	19.1%	8.7%	4.6%	19.3%
1960	8.8%	4.4%	20.8%	9.1%	4.8%	21.0%
1961	9.2%	4.6%	21.3%	9.6%	5.1%	21.7%
1962	9.2%	4.6%	20.9%	9.7%	5.2%	21.3%
1963	9.2%	4.7%	20.5%	9.7%	5.2%	20.9%
1964	9.3%	4.9%	20.3%	9.9%	5.4%	20.8%
1965	9.3%	4.9%	19.4%	9.8%	5.5%	19.9%
1966	9.3%	5.1%	19.2%	9.8%	5.7%	19.7%
1967	9.7%	5.2%	20.7%	10.3%	5.9%	21.4%
1968	10.1%	5.5%	21.7%	10.8%	6.2%	22.5%
1969	10.6%	5.9%	23.4%	11.3%	6.7%	24.3%
1970	11.1%	6.2%	26.2%	12.0%	7.0%	27.1%
1971	11.5%	6.5%	25.9%	12.5%	7.4%	26.9%
1972	11.9%	6.9%	25.6%	13.1%	8.2%	26.8%
1973	11.6%	6.9%	24.3%	12.7%	8.0%	25.3%
1974	11.8%	7.0%	26.4%	12.8%	8.1%	27.3%
1975	12.0%	7.1%	26.1%	13.2%	8.3%	27.5%
1976	12.1%	7.3%	25.9%	13.3%	8.5%	27.2%
1977	12.0%	7.3%	24.9%	13.2%	8.5%	26.3%
1978	11.4%	7.3%	23.3%	12.8%	8.6%	24.7%
1979	11.2%	7.2%	23.4%	12.5%	8.5%	24.7%
1980	11.4%	7.2%	25.8%	12.8%	8.5%	27.5%
1981	11.4%	7.1%	25.8%	13.0%	8.5%	28.2%
1982	11.8%	7.3%	29.1%	13.7%	8.8%	32.8%
1983	12.0%	7.6%	27.3%	13.9%	9.1%	30.6%
1984	11.9%	7.7%	24.6%	13.9%	9.3%	27.7%
1985	12.0%	7.7%	24.9%	14.1%	9.4%	28.5%
1986	12.4%	7.9%	26.5%	14.4%	9.5%	29.8%
1987	12.3%	7.7%	26.2%	14.1%	9.3%	28.6%
1988	12.0%	7.5%	26.0%	13.3%	8.6%	27.7%

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