# Executive Summary

Support is growing among the American public for far-reaching tax reform, to simplify the tax system, and to promote increased saving and investment. Tax reform fever will only intensify during the 1996 Presidential election cycle, since most of the contenders will be proposing some tax reform plan.

All significant tax reform proposals face an uphill fight in Washington. But in the meantime, proponents of the various plans are currently jousting with one another, arguing and debating over which of the plans is fairer, flatter, or simpler.

Unfortunately, the real power in the tax reform debate lies with the government forecasters at the Treasury Department, the Congressional Budget Office, and the Joint Committee on Taxation. Their role in the debate is to score the tax reform plans, determining whether or not they will bring in sufficient revenue to keep from increasing the budget deficit.

A key part of their work is determining whether or not a tax reform plan is "revenue neutral;" i.e., whether or not a tax reform plan will be able to replace the revenues that are being generated by our current tax system. If a tax reform plan is not considered revenue neutral, it faces the serious obstacle of appearing to exacerbate the budget deficit problem.

To determine the revenue effects of a tax reform proposal, one must first calculate the *tax base* of the plan. The tax base sets out which sectors of the economy will be taxed, which activities within those sectors will be subject to the tax, and how much revenue will be generated by a tax on those activities. The tax base thus measures the amount of income that will be subject to the tax. From the tax base one can determine a tax rate that will be revenue neutral.

This paper computes the tax bases for each of three tax reform proposals, which are:

- an unlimited IRA for individuals and a value-added tax for business (a version known as the USA Tax has been proposed by Senators Nunn and Dominici),
- a comprehensive factor income tax (popularly known as the flat tax), and
- a national sales tax.

In this paper, we find that to be revenue neutral, *assuming no growth effects, and assuming no exemptions, deductions or credits:*

- The unlimited IRA for individuals / value-added tax for business is revenue neutral at an individual rate of between 18 and 18.5%.
- The comprehensive factor income tax is revenue neutral at a rate of 13%.
- The national sales tax is revenue neutral at a rate of 20%.

Recognizing that relief for low income taxpayers will inevitably be part of any tax reform, we also have estimated tax rates for the three plans assuming that 20% of revenues would be somehow given back. We find that to be revenue neutral, *assuming no growth effects, and giving back 20% of revenues in the form of exemptions, deductions or credits:*

- The unlimited IRA for individuals / value-added tax for business is revenue neutral at an individual rate of between 22 and 23%.
- The comprehensive factor income tax is revenue neutral at a rate of 17%.
- The national sales tax is revenue neutral at a rate of 25%.

# Which Tax Reform Plan? Developing Consistent Tax Bases for Broad-based Reform

## Introduction

The major proposals under consideration in the current tax reform debate have at least two significant goals: to simplify the tax system, and to promote U.S. saving and investment. They also seek to replace the existing federal personal and corporate income and estate tax mechanisms.

In the current public policy environment where the emphasis is on balancing the budget, any proposal will have to demonstrate how much revenue it will raise compared to the current federal income tax system. If a proposal comes up short on revenue, to make up the difference, either 1) the proposal will have to be altered, or 2) government spending will have to be reduced.

Official revenue estimates are done on a static basis. Government forecasters first project a baseline of total economic activity over the next five to ten years. Revenue implications of proposed changes are then evaluated against that same baseline. In other words, a static forecast would not take into account any growth effects that might occur if a new tax system were implemented.

Static revenue forecasts will thus play a key role during the tax reform debate. They will be used to assess whether the tax rates are too high or too low, or whether the tax base needs to be broadened. In short, the final form of any tax reform bill that might emerge from Congress will very much depend on these official static forecasts.[1]

**NOTE:** *We have long been advocates of dynamic scoring. By ignoring major economic effects, the current system of static estimation is biased toward higher taxes, spending and deficits. To remove this bias, government forecasting methods should move toward the incorporation of dynamic analysis for evaluating tax and spending proposals. We have recently discussed how government estimation methods could move in the right direction and a forthcoming study will specify a dynamic model.*[2]

*However, until such time as government scoring practices consider the economic consequences of policy changes, tax reform proposals, unfortunately, will continue to be judged on flawed, static grounds.*

*That is why this analysis compares the tax reform proposals using static analysis. We will release a dynamic analysis of proposals for tax reform in later studies.*

Already there have been disputes over revenue estimates. For example, the Treasury Department has issued three studies of the Armey flat tax claiming it was short on revenue. The most recent study posits that a 17% flat tax would come up $138 billion short annually, down from its $186 billion estimate of March 1995 and from its fall 1994 estimate of $244 billion.[3] The reason for the drop is that Treasury's first two studies incorrectly computed the tax base for the flat tax. And there remain problems with Treasury's latest estimate as well.

The purpose of this study is to provide a baseline forecast of tax bases that can be used to estimate revenues on a static basis for major tax reform proposals. The next section describes the national income and product accounts from which any tax base must be derived. The third section discusses the characteristics of a tax that is neutral between saving and consumption. The remaining sections derive the static tax bases and implied tax rates for three broad-based tax proposals.

## The Basis for Tax Bases

All taxes must be paid out of current income. For instance, the corporate income tax is not a tax on corporations per se, but is rather a tax on the income that would otherwise go to the shareholders who own the company. Similarly, property taxes, although nominally levied against physical assets, ultimately must be paid out of the income produced by those assets. In sum, taxes on people, businesses and assets are actually taxes on the income generated through current production.

To understand tax bases for various proposals, one must first understand how that income arises. To do that we now turn to a concept taught in introductory macroeconomics—basic national income and product accounting.

Any analysis of tax bases must start with the total amount of goods and services a nation produces, or its gross domestic product (GDP). There are several ways to view GDP. One is from the standpoint of what is produced, another is in terms of the legal form of the producer, and yet another is who produces it.

### *GDP as Output*

According to the Commerce Department, the U.S. economy produced goods and services valued at $6.7 trillion in 1994. That is the maximum size of the tax base available for any tax reform proposal.

The total output of the U.S. economy can be divided into four broad categories:

1. consumption,
2. investment,
3. government, and
4. the foreign sector.

Over two-thirds of output went into goods and services for personal consumption in 1994. The next largest category was purchases of goods and services by government (17.4%) followed by private investment (15.3%). The foreign sector exerted a small negative influence on GDP because the U.S. imported more than it exported. [See Table 1.]

**Table 1**
**GROSS DOMESTIC PRODUCT—WHAT IS PRODUCED**

Source: U.S. Department of Commerce, Summary National Income and Product Accounts.

| GROSS DOMESTIC PRODUCT—WHAT IS PRODUCED | | |
|---|---|---|
| **1994** | **$ billions** | **% of GDP** |
| **Personal consumption expenditures** | **4,628.4** | **68.7%** |
| Durable goods | 591.5 | 8.8% |
| Nondurable goods | 1,394.3 | 20.7% |
| Services | 2,642.7 | 39.2% |
| **Gross private domestic investment** | **1,032.9** | **15.3%** |
| Fixed investment | 980.7 | 14.6% |
| Nonresidential | 697.6 | 10.4% |
| Structures | 182.8 | 2.7% |
| Producers' durable equipment | 514.8 | 7.6% |
| Residential | 283.0 | 4.2% |
| Change in business inventories | 52.2 | 0.8% |
| **Net exports of goods and services** | **-98.2** | **-1.5%** |
| Exports | 718.7 | 10.7% |
| Imports | 816.9 | 12.1% |
| **Government purchases** | **1,175.3** | **17.4%** |
| Federal | 437.3 | 6.5% |
| National defense | 292.3 | 4.3% |
| Nondefense | 145.0 | 2.2% |
| State and local | 738.0 | 11.0% |
| **GROSS DOMESTIC PRODUCT** | **6,738.3** | |

*GDP by Legal Sector*

We also need to know the legal form of GDP because some sectors of the economy are not fully taxed. For example, in 1994, the output of owner-occupied housing, measured as its rental value, composed 6 percent of GDP. It is unlikely that any tax reform proposal will levy a tax on this sector because its income does not arise through market transactions, but rather is imputed by the Commerce Department.[4] [See Table 2.]

**Table 2**
**GROSS DOMESTIC PRODUCT BY LEGAL SECTOR**

Source: U.S. Department of Commerce, Summary National Income and Product Accounts.

| GROSS DOMESTIC PRODUCT BY LEGAL SECTOR | | |
|---|---|---|
| **1994** | **$ billions** | **% of GDP** |
| **Gross Domestic Product** | **6,738.3** | |
| Goods from private business | 5,187.5 | 77.0% |
| Owner-occupied housing output | 404.6 | 6.0% |
| Goods from households and institutions | 302.7 | 4.5% |
| Goods from government enterprises incl. Federal Reserve | 130.9 | 1.9% |
| Services from general government | 712.6 | 10.6% |

Services from general government composed another 10.6 percent of GDP while households and nonprofit institutions contributed 4.5 percent. Wages generated in these sectors are taxed. However, income from capital in these sectors is not taxed, and Commerce attributes no business income to them. Similarly, Commerce measures the profits earned by government enterprises, such as the U.S. Postal Service, the Federal Housing Administration and the Tennessee Valley Authority, as surpluses, which again are not linked to capital income.

That leaves the private business sector, which accounted for 77 percent of GDP in 1994, as the sole component of the business tax base and the major component of the labor tax base.

*GDP by Factor Income*

Another way to view GDP is in terms of the factors of capital and labor that produce it. The total value of output is returned to the factors of production as payment for their services in the form of wages, profits, rents, recovery of capital, and so forth.

Factor payments are important from an accounting viewpoint because they are most closely aligned with what people normally think of as income. In 1994, gross factor payments totaled $6.7 trillion, or the value of GDP. Labor received the largest share (59.4%) followed by corporate profits (8.1%) and proprietors' income (7%). [See Table 3.]

| GROSS DOMESTIC PRODUCT AS FACTOR INCOME | | |
|---|---|---|
| **1994** | **$ billions** | **% of GDP** |
| **Compensation of employees** | **4,004.6** | **59.4%** |
| Wages and salaries | 3,279.0 | 48.7% |
| Disbursements | 3,279.0 | 48.7% |
| Wage accruals less disbursements | 0.0 | 0.0% |
| Supplements to wages and salaries | 725.6 | 10.8% |
| Employer contributions for social insurance | 344.6 | 5.1% |
| Other labor income | 381.0 | 5.7% |
| **Proprietors' income with IVA and CCA** | **473.7** | **7.0%** |
| **Rental income of persons with CCA** | **27.7** | **0.4%** |
| **Corporate profits with IVA and CCA** | **542.7** | **8.1%** |
| Profits before tax | 524.5 | 7.8% |
| Profits tax liability | 202.5 | 3.0% |
| Profits after tax with IVA and CCA | 340.2 | 5.0% |
| Dividends | 205.2 | 3.0% |
| Undistributed profits with IVA and CCA | 135.1 | 2.0% |
| Inventory valuation adjustment | -19.5 | -0.3% |
| Capital consumption adjustment | 37.7 | 0.6% |
| **Net interest** | **409.7** | **6.1%** |
| **National income** | **5,458.4** | **81.0%** |
| **Business transfer payments** | **30.7** | **0.5%** |
| To persons | 23.5 | 0.3% |
| To rest of the world | 7.2 | 0.1% |
| **Indirect business tax and nontax liability** | **554.0** | **8.2%** |
| Less: Subsidies less current surplus of govt. enterprises | 0.7 | 0.0% |
| **Consumption of fixed capital** | **715.3** | **10.6%** |
| **Gross national income** | **6,757.7** | **100.3%** |
| **Statistical discrepancy** | **-30.9** | **-0.5%** |
| **Gross national product** | **6,726.8** | **99.8%** |
| Less: Receipts of factor income from the rest of the world | 167.1 | 2.5% |
| Plus: Payments of factor income to the rest of the world | 178.6 | 2.7% |
| **GROSS DOMESTIC PRODUCT** | **6,738.3** | |

**Table 3**
**GROSS DOMESTIC PRODUCT AS FACTOR INCOME**

Source: U.S. Department of Commerce, Summary National Income and Product Accounts.

Note: IVA denotes inventory valuation adjustment and CCA denotes capital consumption adjustment.

*Personal Income*

Not all factor payments flow back to individuals. For example, the employer portions of Social Security, Medicare and unemployment taxes go directly to government, as do indirect business taxes such as sales and property taxes.

Factor payments that *do* flow back to people show up in the national accounts as *personal income*.[5] In 1994, personal income amounted to $5.7 trillion, or 85 percent of GDP. The largest category was wages and salaries (57.5%) followed by transfer payments (16.9%), primarily from government. [See Table 4.]

**Table 4**
**PERSONAL INCOME AND OUTLAYS, 1994**

Source: U.S. Department of Commerce, Summary National Income and Product Accounts.

Note: IVA denotes inventory valuation adjustment and CCA denotes capital consumption adjustment.

| PERSONAL INCOME AND OUTLAYS, 1994 | | |
|---|---|---|
| **HOW PERSONAL INCOME IS EARNED** | **$ billions** | **% of Personal Income** |
| Wage and salary disbursements | 3,279.0 | 57.5% |
| Other labor income | 381.0 | 6.7% |
| Proprietors' income with IVA and CCA | 473.7 | 8.3% |
| Rental income of persons with CCA | 27.7 | 0.5% |
| Personal dividend income | 194.3 | 3.4% |
| Dividends | 205.2 | 3.6% |
| Less: Dividends received by government | 10.9 | 0.2% |
| Personal interest income | 664.0 | 11.6% |
| Net interest | 409.7 | 7.2% |
| Interest paid by government | 286.1 | 5.0% |
| Less: Interest received by government | 149.4 | 2.6% |
| Interest paid by persons | 117.6 | 2.1% |
| Transfer payments to persons | 963.4 | 16.9% |
| From business | 23.5 | 0.4% |
| From government | 939.9 | 16.5% |
| Less: Personal contributions for social insurance | 281.4 | 4.9% |
| **PERSONAL INCOME** | **5,701.7** | |
| **HOW PERSONAL INCOME IS SPENT** | | |
| Personal tax and nontax payments | 742.1 | 13.0% |
| Personal outlays | 4,756.5 | 83.4% |
| Personal consumption expenditures | 4,628.4 | 81.2% |
| Interest paid by persons | 117.6 | 2.1% |
| Personal transfer payments to rest of the world (net) | 10.5 | 0.2% |
| Personal saving | 203.1 | 3.6% |
| **PERSONAL TAXES, OUTLAYS, AND SAVINGS** | **5,701.7** | |

Personal income is either spent, saved or used to pay taxes. In 1994, 81.2 percent of personal income went for consumption and 13 percent went for taxes, while only 3.6 percent was saved. [See Table 4.]

## Projecting the National Accounts

The national accounts just discussed form the basis for generating the tax bases needed to evaluate tax reform proposals. Information presented in Tables 1 through 4 is for 1994, the latest year for which complete Commerce estimates are available. However, the budget process requires that revenue estimates extend out five years for bills considered in the House of Representatives and ten years for bills in the Senate.

We have projected a detailed set of accounts through the year 2010. This baseline forecast uses the economic assumptions contained in the latest Congressional Budget Office forecast.[6] We have assumed that the federal government grows as provided under current law, and that other sectors grow sufficiently to yield the total target rate of growth. We project factor incomes using historical share relationships. For example, labor's share of private output is a constant two-thirds. Historical trends also are used to divide labor income into wages and salaries, social insurance payments and fringe benefits. We use a similar procedure for capital income components.

Tables in the appendix show our projection for selected years for the accounts discussed above. An annual set of accounts is available in spreadsheet form on the Internet [http://www.ipi.org/dload.html] at the Institute for Policy Innovation's World Wide Website [http://www.ipi.org].

*Federal Tax Receipts*

A forecast of federal tax receipts under current law also is needed to evaluate tax reform proposals. In 1995, federal taxes should amount to a little under $1.5 trillion, or 20.6 percent of GDP. Under our forecast, federal receipts will grow slightly to 20.7 percent of GDP in 2010. [See Table 5.]

*"…tax reform would affect only half of current federal revenues, leaving untouched payroll taxes, excise taxes and user fees."*

**Table 5**
**FEDERAL TAX RECEIPTS**

Source: U.S. Department of Commerce, National Income and Product Accounts, Table 3.2.

Estimates for 1995 and beyond are from the Fiscal Associates Tax Model.

| FEDERAL TAX RECEIPTS | | | | | |
|---|---|---|---|---|---|
| **(amounts in $billions)** | **1990** | **1995** | **2000** | **2005** | **2010** |
| **Federal Receipts** | **1,111.4** | **1,466.6** | **1,900.6** | **2,427.4** | **3,131.8** |
| Personal tax and nontax receipts | 484.3 | 607.0 | 799.4 | 1,010.7 | 1,309.4 |
| Income taxes | 471.5 | 589.4 | 777.0 | 982.5 | 1,273.6 |
| Estate and gift taxes | 11.6 | 15.7 | 19.8 | 24.8 | 31.1 |
| Nontaxes | 1.3 | 1.9 | 2.6 | 3.5 | 4.7 |
| Corporate profits tax accruals | 116.4 | 177.7 | 228.2 | 292.4 | 374.6 |
| Federal Reserve banks | 23.6 | 18.5 | 23.7 | 30.4 | 39.0 |
| Other | 92.8 | 159.2 | 204.4 | 262.0 | 335.6 |
| Indirect business taxes | 65.8 | 96.9 | 124.4 | 159.4 | 204.2 |
| Excise taxes | 35.9 | 56.7 | 72.8 | 93.3 | 119.6 |
| Customs duties | 17.5 | 22.6 | 29.0 | 37.2 | 47.7 |
| Nontaxes | 12.4 | 17.5 | 22.5 | 28.8 | 36.9 |
| Contributions for social insurance | 444.8 | 585.0 | 748.6 | 964.8 | 1,243.6 |
| **FEDERAL RECEIPTS AS % GDP** | **20.0%** | **20.6%** | **20.8%** | **20.7%** | **20.7%** |
| **TAXES SUBJECT TO REFORM** | | | | | |
| Personal income taxes | 471.5 | 589.4 | 777.0 | 982.5 | 1,273.6 |
| Estate and gift taxes | 11.6 | 15.7 | 19.8 | 24.8 | 31.1 |
| Corporate profits tax | 92.8 | 159.2 | 204.4 | 262.0 | 335.6 |
| **Total Taxes to be Replaced** | **575.9** | **764.3** | **1,001.3** | **1,269.3** | **1,640.3** |
| **AS % FEDERAL RECEIPTS** | **51.8%** | **52.1%** | **52.7%** | **52.3%** | **52.4%** |

Current tax reform proposals contemplate replacing the personal and corporate income taxes and estate and gift taxes. These taxes account for roughly 52 percent of federal receipts. In other words, *tax reform would affect only half of current federal revenues*, leaving untouched payroll taxes, excise taxes and user fees.

## Achieving a Neutral Tax

One purpose of the current round of tax reform is to produce a tax system that is more favorable to U.S. saving and investment. As we have documented in previous studies, private saving is only half what it was during the postwar period.[7] And investment after depreciation has averaged only 4.4 percent of GDP since 1992 compared with 5.7 percent during the postwar period.[8]

One reason for this slowdown is the increasing tax burden on saving and investment. For example, today an extra dollar earned by private business capital in the U.S. must pay 66.3 cents in federal, state and local taxes. This marginal tax on business capital has been rising since 1987 and is close to its all-time high of 68.5 percent reached in 1982.[9]

*"…today an extra dollar earned by private business capital in the U.S. must pay 66.3 cents in federal, state and local taxes."*

The way to reverse this trend is to remove the existing bias against saving and investment in the current tax system. This bias arises because the current system taxes income from saving and investment twice. The first time taxation occurs is when the income that is to be saved or invested is initially earned. A second round of taxation occurs when the return on saving or investment is again taxed.[10]

Remember that for saving or investment to occur, someone must postpone consumption. Savers and investors demand a reward, or return, for putting off consumption into the future. Taxing both the initial saving (postponed consumption) and its reward favors current consumption over future consumption.

Removing the bias against saving and investment means that income should be taxed only once. There are two general ways that this can be done. Specifically:

1. If the initial saving or investment is made with *aftertax* dollars, the return on that saving and investment should not be taxed.
2. If the initial saving or investment is made with *pretax* dollars, the return on that saving and investment should be taxed.

# Three Broad-Based Tax Systems

Proposals currently under consideration are variations on the following three broad-based tax reforms:

1. an unlimited IRA for individuals and a value-added tax for businesses;
2. a comprehensive factor income tax; and
3. a national sales tax.

Although all attempt to tax saving and investment only once, *each uses a different tax base.*

For this analysis, we first derive the *broadest* tax base for each of the three types of reform. In other words, we assume no exemptions, deductions or credits. By so doing, we can determine the lowest, single rate possible for each type of reform.

Providing relief for lower income taxpayers will inevitably be part of any tax reform. To illustrate the effect that progressivity could have on tax rates, we also derive the rates that would be needed if 20 percent of tax revenues were to be used for some type of exemptions, deductions or credits.

## Unlimited IRA for Individuals, Value-added Tax for Businesses

For individuals, this tax reform would provide an unrestricted Individual Retirement Account (IRA). Taxpayers would deduct from taxable income any savings or investment they made each year. Income earned on that savings and investment would accumulate tax free and be taxed only when used for consumption.

For businesses, this tax would radically broaden the base. The new base becomes gross receipts less new investment (including inventory) and purchases of intermediate goods. In other words, the business tax works like a subtraction method value-added tax.[11]

Both the individual and business taxes would be neutral between consumption and saving. Individuals and businesses would save and invest with pretax dollars because any investment is subtracted from the tax base. However, they would pay tax on the returns. (Principle #2 above.)

To derive the tax rates for this tax, we follow the approach taken in the USA tax proposal of Senators Nunn and Domenici. We first derive the tax base and revenues for an 11 percent business tax and then solve for the single tax rate that would have to be collected at the individual level, assuming no exemptions or deductions.[12] Following the USA tax, we assume a full credit at the business level for payroll taxes paid by employers and a full credit at the individual level for the employee portion.

In 1995, U.S. private businesses added an estimated $5.5 trillion in value to GDP.[13] Subtracting business investment and taxes on output reduces the business value-added tax base to $4.6 trillion. After a credit for employer payroll taxes, an 11% business value-added tax would raise $229 billion in revenue. [See Table 6.]

**Table 6**
**TAX BASE FOR UNLIMITED IRA FOR INDIVIDUALS, VALUE-ADDED TAX FOR BUSINESSES**

[1] Goods from private business, Appendix Table A-2. Households, nonprofit institutions and government would be exempt.

[2] Sales taxes, excise taxes and customs duties.

[3] Commerce, NIPA Table 4.1.

[4] See Appendix Table A-5.

[5] See Appendix Table A-6 for derivation.

[6] Assumes 20 percent of tax revenues are returned in some fashion.

| TAX BASE FOR UNLIMITED IRA FOR INDIVIDUALS, VALUE-ADDED TAX FOR BUSINESSES | | | | |
|---|---|---|---|---|
| **(amounts in $billions)** | **1995** | **2000** | **2005** | **2010** |
| **FOR BUSINESSES:** | | | | |
| **Gross private business value-added[1]** | **5,509.1** | **7,074.7** | **9,067.7** | **11,614.2** |
| Less Taxes on output[2] | 319.6 | 410.4 | 526.0 | 673.7 |
| Less Business investment[3] | 625.3 | 676.2 | 741.0 | 823.1 |
| *Equals:* | | | | |
| **GROSS BUSINESS PROFITS** | **4,564.2** | **5,988.1** | **7,800.8** | **10,117.4** |
| **11% GROSS PROFITS TAX** | 502.1 | 658.7 | 858.1 | 1,112.9 |
| Less Employer social insurance contributions | 273.1 | 350.7 | 449.5 | 575.8 |
| *Equals:* | | | | |
| **BUSINESS TAX REVENUES** | **228.9** | **308.0** | **408.6** | **537.2** |
| **FOR INDIVIDUALS:** | | | | |
| **Adjusted gross income as measured by IRS[4]** | **4,239.8** | **5,522.8** | **7,166.7** | **9,301.9** |
| Plus Employee fringe benefits | 401.7 | 514.5 | 663.2 | 855.1 |
| Less Personal saving in AGI[5] | 162.2 | 247.6 | 363.6 | 519.7 |
| *Equals* | | | | |
| **INDIVIDUAL TAX BASE** | **4,479.3** | **5,789.6** | **7,466.3** | **9,637.3** |
| **TAX REVENUES TO BE REPLACED** | **764.3** | **1,001.3** | **1,269.3** | **1,640.3** |
| Plus Employee social insurance contributions | 296.6 | 379.6 | 489.2 | 630.6 |
| Less Revenues From Business Tax | 228.9 | 308.0 | 408.6 | 537.2 |
| *Equals* | | | | |
| **INDIVIDUAL TAX REVENUES** | **832.0** | **1,072.9** | **1,349.9** | **1,733.8** |
| **INDIVIDUAL TAX RATE** | **18.6%** | **18.5%** | **18.1%** | **18.0%** |
| **INDIVIDUAL TAX RATE WITH EXEMPTIONS[6]** | **22.8%** | **22.9%** | **22.3%** | **22.2%** |

For individuals the tax base would start with adjusted gross income (AGI), estimated to be $4.2 trillion in 1995. After adding in employee fringe benefits and deducting the savings of individuals, the tax base would increase to $4.5 trillion in 1995.

*Assuming no growth effects and a business tax rate of 11%:*

- Replacing the revenues from individual income, corporate income as well as estate and gift taxes would require an individual tax rate of between 18% and 18.5%.
- If 20 percent of the tax revenues to be replaced are given back through exemptions, deductions or credits, the individual tax rate would have to be between 22% and 23% under static assumptions.

## Comprehensive Factor Income Tax

A comprehensive factor income tax is what people usually mean when they talk about the "flat tax." Designed by Professors Robert Hall and Alvin Rabushka, individuals would pay tax on labor income and businesses would pay tax on capital income.[14]

This tax would be neutral between saving and consumption. For individuals, it would follow principle #1 described above. In other words, the income that went into saving would be taxed, while the returns from that saving would be free of tax. As a result, individuals would pay tax on their wages and salaries.

For businesses, principle #2 is followed. The business tax base is gross income less new investment. In other words, the initial act of investment is free of tax

while the returns are taxed. Wages and salaries, which are taxed at the individual level, also would be deducted from the business tax base as well as taxes on output such as sales and excise taxes.

In 1995, the individual tax base would amount to $3.5 trillion, the amount of wages and salaries paid to workers in the economy. Deductions for wages and salaries, business investment and taxes on output reduce the business tax base from $6.6 trillion to $2.1 trillion. The comprehensive tax base, therefore, would amount to over $5.6 trillion in 1995. By 2010, the base would grow to $12.5 trillion. [See Table 7.]

| COMPREHENSIVE FACTOR INCOME TAX BASE | | | | |
|---|---|---|---|---|
| **(amounts in $billions)** | **1995** | **2000** | **2005** | **2010** |
| **FOR INDIVIDUALS:** | | | | |
| **Wages and salaries[1]** | **3,455.3** | **4,421.5** | **5,697.9** | **7,344.8** |
| *Plus:* | | | | |
| Distributions from pension plans[2] | 37.1 | 37.3 | 35.2 | 27.4 |
| Unemployment insurance payments[3] | 20.5 | 26.1 | 33.5 | 43.1 |
| *Equals:* | | | | |
| **INDIVIDUAL TAX BASE** | **3,512.9** | **4,484.8** | **5,766.7** | **7,415.2** |
| **FOR BUSINESSES:** | | | | |
| *GDP from:*[4] | | | | |
| Private business | 5,509.1 | 7,074.7 | 9,067.7 | 11,614.2 |
| Households and institutions | 323.7 | 456.5 | 643.4 | 906.7 |
| Government enterprises less surpluses | 85.5 | 109.8 | 140.7 | 180.2 |
| General government | 726.0 | 871.1 | 1,099.4 | 1,387.6 |
| *Equals:* | | | | |
| **GROSS BUSINESS RECEIPTS** | **6,644.3** | **8,512.1** | **10,951.2** | **14,088.8** |
| *Less:* | | | | |
| Wages and salaries[1] | 3,455.3 | 4,421.5 | 5,697.9 | 7,344.8 |
| Contributions to pension plans | 74.2 | 74.5 | 70.4 | 54.8 |
| Unemployment contributions | 30.7 | 39.1 | 50.3 | 64.6 |
| Taxes on output[5] | 319.6 | 410.4 | 526.0 | 673.7 |
| Business Investment[6] | 625.3 | 676.2 | 741.0 | 823.1 |
| *Equals:* | | | | |
| **BUSINESS TAX BASE** | **2,139.2** | **2,890.4** | **3,865.6** | **5,127.8** |
| **COMPREHENSIVE TAX BASE (individual & business)** | **5,652.1** | **7,375.2** | **9,632.3** | **12,543.1** |
| **TAX REVENUES TO BE REPLACED** | **764.3** | **1,001.3** | **1,269.3** | **1,640.3** |
| **COMPREHENSIVE TAX RATE** | **13.5%** | **13.6%** | **13.2%** | **13.1%** |
| **COMPREHENSIVE TAX RATE WITH EXEMPTIONS[7]** | **16.9%** | **17.0%** | **16.5%** | **16.3%** |

**Table 7**
**COMPREHENSIVE FACTOR INCOME TAX BASE**

[1] See Appendix Table A-3.

[2] One-half of private pension and profit-sharing contributions, U.S. Department of Commerce, National Income and Product Accounts (NIPA), Table 6.11.

[3] Two-thirds of unemployment insurance contributions, NIPA Table 8.14.

[4] See Appendix Table A-2. The output of government, households and institutions contains only a labor component. The capital component of households and institutions is included in personal consumption expenditures, NIPA Table 8.18.

[5] Sales taxes, excise taxes and customs duties.

[6] NIPA Table 4.1.

[7] Assumes 20 percent of tax revenues are returned in some fashion.

- Replacing the revenues from individual and corporate taxes as well as estate and gift taxes would require a tax rate on businesses and individuals of between 13% and 13.5%, *assuming no growth effects.*
- If 20 percent of the tax revenues to be replaced are given back through exemptions, deductions or credits, businesses and individuals would face a 17% tax rate under static assumptions.[15]

## National Sales Tax

A national sales tax would impose a transactions tax on the sale of goods and services used for consumption. Purchases by businesses would be exempt. It would abolish both the corporate and individual income and estate taxes. In other words, instead of individuals and businesses paying taxes via returns, revenue would be collected at the cash register.

A sales tax would achieve neutrality between saving and consumption under principle #2. By taxing final sales, but not the intermediate stages of production, a sales tax exempts initial saving and investment from tax. The tax occurs only when savers, investors or workers use their returns from either labor or capital on consumption.

The starting point of a national sales tax would be personal consumption expenditures, estimated to be $4.7 trillion in 1995. If this whole amount could be taxed, replacing $764.3 billion in personal and corporate income taxes along with the estate and gift taxes would take a tax rate of 16 percent with no exemptions.

**Table 8**
**NATIONAL SALES TAX BASE**

[1] See Appendix Table A-1

[2] Imputed gross product for farm and nonfarm housing plus employer-provided and employee lodging. See U.S. Department of Commerce, National Income and Product Accounts (NIPA), Table 8.18.

[3] Other imputations include: Rental value of buildings and equipment owned and used by nonprofit institutions serving individuals; services furnished without payment by financial intermediaries except life insurance carriers and private noninsured pension plans; gross farm products consumed on farms; food furnished to employees, including military and domestic service; standard clothing issued to military personnel; employer-paid health and life insurance premiums; and net purchases of buildings and equipment owned and used by nonprofit institutions serving individuals. See NIPA Table 8.18.

[4] Net purchases of buildings and equipment owned and used by nonprofit institutions serving individuals, NIPA Table 8.18.

[5] Ninety-six percent of goods from households and institutions. See Appendix Table A-2.

[6] Goods from government enterprises including Federal Reserve. See Appendix Table A-2.

[7] Services furnished without payment by financial intermediaries except life insurance carriers and private noninsured pension plans, NIPA Table 8.18.

[8] NIPA Table 8.18.

[9] Assumes 20 percent of tax revenues are returned in some fashion.

| NATIONAL SALES TAX BASE | | | | |
|---|---|---|---|---|
| **(amounts in $billions)** | **1995** | **2000** | **2005** | **2010** |
| **Personal consumption expenditures[1]** | **4,736.7** | **6,080.5** | **7,927.4** | **10,302.4** |
| *Less* | | | | |
| Owner-occupied housing imputation[2] | 197.9 | 264.5 | 351.4 | 465.0 |
| Other imputations[3] | 448.6 | 612.5 | 833.7 | 1,137.7 |
| *Equals:* | | | | |
| **Personal consumption less imputations** | **4,090.2** | **5,203.6** | **6,742.3** | **8,699.7** |
| *Less* | | | | |
| Purchases of nonprofit institutions[4] | 45.0 | 57.4 | 73.3 | 93.5 |
| *Equals:* | | | | |
| **Intermediate Sales Tax Base** | **4,045.2** | **5,146.2** | **6,669.0** | **8,606.2** |
| *Less* | | | | |
| Less Output of nonprofit institutions[5] | 310.8 | 438.2 | 617.6 | 870.5 |
| Less Output of government enterprises[6] | 139.0 | 178.5 | 228.8 | 293.1 |
| *Plus* | | | | |
| Value of financial services to persons[7] | 152.2 | 199.7 | 260.1 | 339.7 |
| Net purchases of owner-occupied housing[8] | 232.2 | 287.9 | 356.5 | 441.6 |
| *Equals:* | | | | |
| **NATIONAL SALES TAX BASE** | **3,979.9** | **5,016.9** | **6,439.2** | **8,223.9** |
| **TAX REVENUES TO BE REPLACED** | **764.3** | **1,001.3** | **1,269.3** | **1,640.3** |
| **SALES TAX RATE** | **19.2%** | **20.0%** | **19.7%** | **19.9%** |
| **SALES TAX RATE WITH EXEMPTIONS[9]** | **24.0%** | **24.9%** | **24.6%** | **24.9%** |

However, certain items that the Commerce Department imputes as part of personal consumption would not show up at the cash register. Subtracting out imputations such as the value of owner-occupied housing and the rental value of buildings owned by nonprofit institutions brings the 1995 base down to $4.1 trillion.

Finally, some sectors would be exempt from a national sales tax. After taking out the output of the nonprofit and government sectors, the final value of the national sales tax base would be $4 trillion in 1995.[16] By 2010, that tax base would grow to $8.2 trillion. [See Table 8.]

- To replace the revenues from individual and corporate taxes as well as estate and gift taxes would require a national sales tax rate of 20%, *assuming no growth effects.*
- If 20 percent of the tax revenues to be replaced are given back through exemptions, deductions or credits, a national sales tax rate would have to be about 25% under static assumptions.[17]

If certain categories of expenditures are exempted from the sales tax, a national sales tax rate could end up even higher. For example, food, often mentioned as a candidate for exemption, accounts for 14 percent of personal consumption expenditures. Medical care, another prime candidate, makes up almost 17 percent. Leaving both food and medical care out of the tax base would raise the sales tax rate by one-half. [See Table 9.]

| PERSONAL CONSUMPTION EXPENDITURES | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **(amounts in $billions)** | **1995** | % | **2000** | % | **2005** | % | **2010** | % |
| Personal consumption expenditures | 4,736.7 | 100.0% | 6,080.5 | 100.0% | 7,927.4 | 100.0% | 10,302.4 | 100.0% |
| Durable goods | 607.1 | 12.8% | 790.8 | 13.0% | 1,046.3 | 13.2% | 1,379.7 | 13.4% |
| Motor vehicles and parts | 258.1 | 5.4% | 337.8 | 5.6% | 449.0 | 5.7% | 594.9 | 5.8% |
| Furniture & household equipment | 100.2 | 2.1% | 131.0 | 2.2% | 173.9 | 2.2% | 230.2 | 2.2% |
| Other | 18.7 | 0.4% | 24.2 | 0.4% | 31.9 | 0.4% | 41.9 | 0.4% |
| Nondurable goods | 1,377.3 | 29.1% | 1,546.7 | 25.4% | 1,729.3 | 21.8% | 1,828.4 | 17.7% |
| Food | 668.9 | 14.1% | 738.1 | 12.1% | 810.8 | 10.2% | 842.2 | 8.2% |
| Clothing and shoes | 242.7 | 5.1% | 268.0 | 4.4% | 294.7 | 3.7% | 306.4 | 3.0% |
| Gasoline and oil | 107.2 | 2.3% | 127.7 | 2.1% | 151.5 | 1.9% | 170.0 | 1.6% |
| Fuel oil and coal | 13.2 | 0.3% | 13.0 | 0.2% | 12.8 | 0.2% | 11.9 | 0.1% |
| Other | 345.3 | 7.3% | 399.9 | 6.6% | 459.5 | 5.8% | 497.8 | 4.8% |
| Services | 2,752.3 | 58.1% | 3,743.0 | 61.6% | 5,151.8 | 65.0% | 7,094.3 | 68.9% |
| Housing | 677.8 | 14.3% | 885.3 | 14.6% | 1,174.3 | 14.8% | 1,552.8 | 15.1% |
| Household operation | 270.4 | 5.7% | 347.3 | 5.7% | 453.0 | 5.7% | 589.1 | 5.7% |
| Electricity and gas | 115.9 | 2.4% | 149.9 | 2.5% | 196.9 | 2.5% | 257.9 | 2.5% |
| Other household operation | 154.5 | 3.3% | 197.4 | 3.2% | 256.1 | 3.2% | 331.2 | 3.2% |
| Transportation | 183.7 | 3.9% | 234.9 | 3.9% | 305.2 | 3.8% | 395.2 | 3.8% |
| Medical care | 784.0 | 16.6% | 1,165.4 | 19.2% | 1,723.6 | 21.7% | 2,549.1 | 24.7% |
| Other | 836.4 | 17.7% | 1,110.1 | 18.3% | 1,495.7 | 18.9% | 2,008.1 | 19.5% |

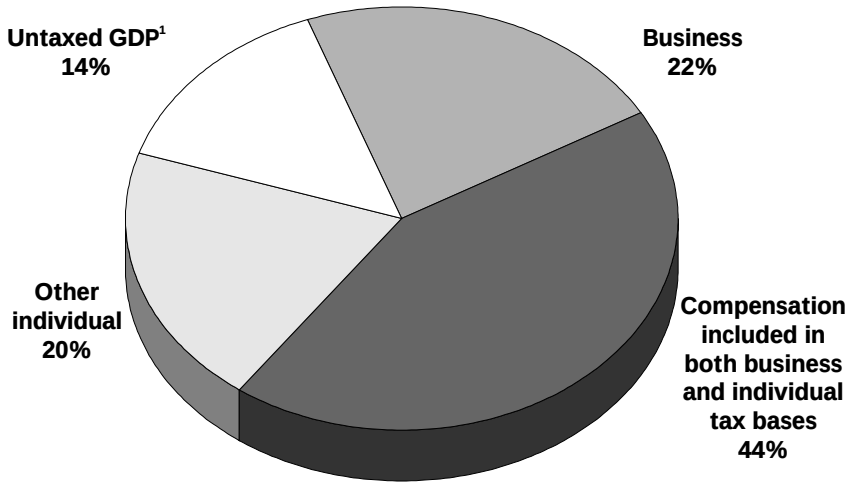
**Table 9**
**PERSONAL CONSUMPTION EXPENDITURES**

Estimates for 1995 and beyond are from the Fiscal Associates, Inc. Model based on historical data from the U.S. Department of Commerce, National Income and Product Accounts, Table 2.2.

## Summary

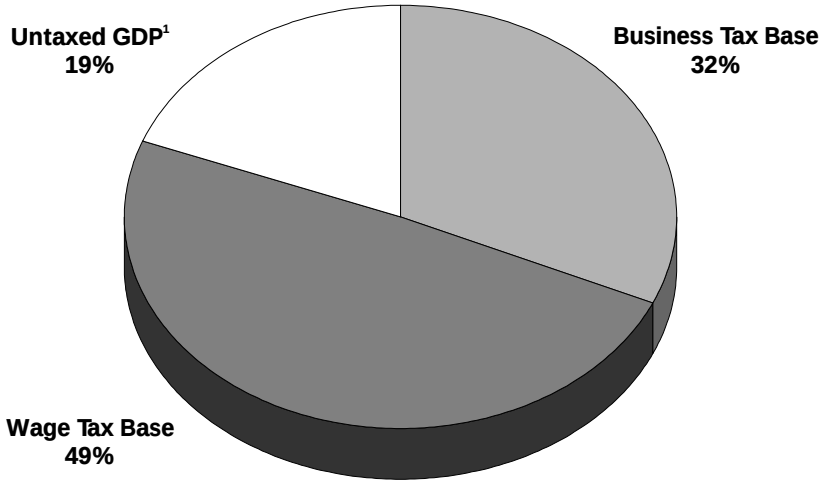
The unlimited IRA, business value-added tax proposal would tax almost 85 percent of GDP. Untaxed GDP consists mainly of investment and taxes on output such as sales and excise taxes. Because labor compensation is not deductible at the business level, the labor income of workers in private businesses would appear in both the business and individual tax bases. Labor compensation in other sectors, such as government, would only be taxed at the individual level. Despite having the largest base relative to GDP, this proposal does not have the lowest tax rate because it also would credit employers and workers for the payroll taxes they pay. [See Figure 1 and Table 10]

**Figure 1**
**UNLIMITED IRA, VALUE-ADDED TAX BASE AS A PERCENT OF GDP**
[1] Investment; taxes on output




The comprehensive factor income tax would cover over 80 percent of GDP. Again the untaxed portion of GDP is composed mainly of investment and taxes on output. Because wages and salaries are deductible at the business level, they would appear only in the individual tax base. [See Figure 2]

**Figure 2**
**COMPREHENSIVE FACTOR INCOME TAX BASE AS A PERCENT OF GDP**
[1] Investment; taxes on output




The tax base of the comprehensive factor income tax is slightly smaller than that of the unlimited IRA, business value-added tax proposal because of a timing difference in the way investments are taxed. *The latter constitutes a windfall loss to individuals because it would tax income from previous investments that had been made with aftertax dollars.* This windfall loss does not occur under the factor income tax.

A national sales tax would have a considerably smaller tax base than the previous two proposals. In addition to investment, most of the 45 percent of GDP that would be untaxed represents the labor compensation arising in government, households and nonprofit institutions. [See Figure 3.]

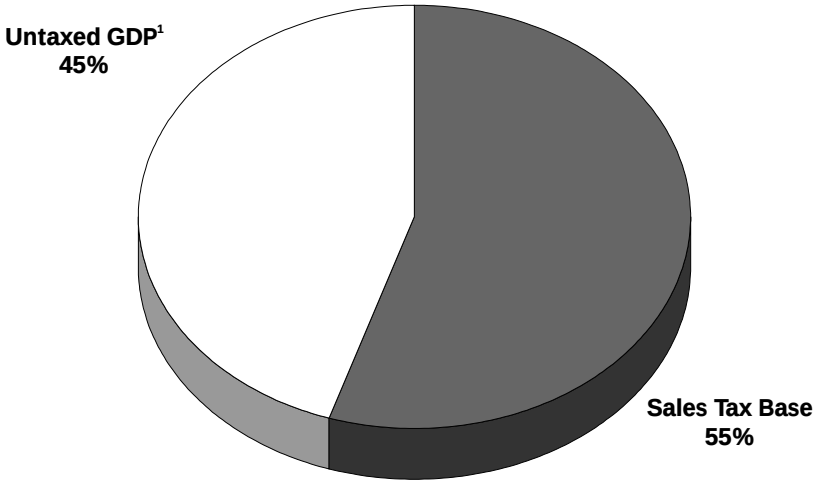



**Figure 3**
**NATIONAL SALES TAX BASE AS A PERCENT OF GDP**

[1] Investment; government, households and institutions.

| SUMMARY OF BROAD-BASED TAX REFORMS | | | |
|---|---|---|---|
| | **Unlimited IRA for Individuals, Value-added Tax for Businesses** | **Comprehensive Factor Income Tax** | **National Sales Tax** |
| **Neutrality for Individuals**[1] | ❷ | ① | ❷ |
| **Neutrality for Businesses**[1] | ❷ | ❷ | ❷ |
| **Lowest, single tax rate**[2] | 18–18.5% Individuals<br>11% Businesses | 13–13.5% | 20% |
| **Tax rate with exemptions of 20%**[3] | 22% individuals<br>11% businesses | 17% | 25% |

**Table 10**
**SUMMARY OF BROAD-BASED TAX REFORMS**

[1] ① means initial saving of investment is made with *aftertax* dollars and the return is not taxed. ❷ means initial saving or investment is made with *pretax* dollars and the return is taxed.

[2] Assumes no growth effects.

[3] Assumes that 20 percent of tax returns are used for some type of exemption.

## Conclusion

The exact nature of tax reform proposals will change many times. What is important is to evaluate the revenue consequences of any proposal using the same ground rules. That means the starting point should be the same set of national income accounts and the amount of revenue to be raised should be comparable. Doing so provides policy makers with valid comparisons. [See Table 10]

For instance, this study has shown the lowest average tax rates possible for the three general types of reform currently under consideration *assuming no growth effects.* On a static basis, a sales tax will require a higher rate than factor income-based taxes. Using a different criterion such as minimizing taxpayer interaction with the tax system might change the rankings.

Finally, rankings under any criterion can and will change once growth effects are considered. Estimates of the growth effects of each major tax reform proposal will be released in later studies in this series.

# Appendix

**Table A-1**
**FORECAST OF GDP BY OUTPUT USE**

Source: Fiscal Associates Inc. Model using CBO economic assumptions from August 1995.

| FORECAST OF GDP BY OUTPUT USE | | | | |
|---|---|---|---|---|
| **(amounts in $billions)** | **1995** | **2000** | **2005** | **2010** |
| **Personal consumption expenditures** | **4,736.7** | **6,080.5** | **7,927.4** | **10,302.4** |
| Durable goods | 607.1 | 790.8 | 1,046.3 | 1,379.7 |
| Nondurable goods | 1,377.3 | 1,546.7 | 1,729.3 | 1,828.4 |
| Services | 2,752.3 | 3,743.0 | 5,151.8 | 7,094.3 |
| **Gross private domestic investment** | **1,237.8** | **1,543.2** | **1,920.7** | **2,424.2** |
| Fixed investment | 1,175.2 | 1,502.0 | 1,868.2 | 2,357.2 |
| Nonresidential | 836.1 | 1,068.6 | 1,329.1 | 1,677.0 |
| Structures | 219.1 | 280.0 | 348.3 | 439.4 |
| Producers' durable equipment | 617.0 | 788.6 | 980.8 | 1,237.6 |
| Residential | 339.1 | 433.4 | 539.1 | 680.2 |
| Change in business inventories | 62.6 | 41.1 | 52.5 | 67.0 |
| **Net exports of goods and services** | **-68.0** | **-7.4** | **-1.1** | **-0.2** |
| Exports | 760.2 | 974.1 | 1,252.9 | 1,611.3 |
| Imports | 828.2 | 981.5 | 1,254.0 | 1,611.5 |
| **Government purchases** | **1,221.1** | **1,516.3** | **1,899.6** | **2,381.0** |
| Federal | 437.3 | 509.9 | 609.5 | 728.7 |
| National defense | 285.4 | 326.9 | 387.0 | 458.3 |
| Nondefense | 151.9 | 183.0 | 222.5 | 270.4 |
| State and local | 783.8 | 1,006.5 | 1,290.0 | 1,652.3 |
| **GROSS DOMESTIC PRODUCT** | **7,127.5** | **9,132.7** | **11,746.5** | **15,107.5** |

**Table A-2**
**FORECAST OF GROSS DOMESTIC PRODUCT BY LEGAL SECTOR**

Source: Fiscal Associates Inc. Model using CBO economic assumptions from August 1995.

| FORECAST OF GROSS DOMESTIC PRODUCT BY LEGAL SECTOR | | | | |
|---|---|---|---|---|
| **(amounts in $billions)** | **1995** | **2000** | **2005** | **2010** |
| **Nominal GDP** | **7,127.5** | **9,132.7** | **11,746.5** | **15,107.5** |
| Goods from private business | 5,509.1 | 7,074.7 | 9,067.7 | 11,614.2 |
| Owner-occupied housing output | 429.7 | 551.8 | 707.2 | 905.9 |
| Goods from households and institutions | 323.7 | 456.5 | 643.4 | 906.7 |
| Goods from government enterprises inc. Fed. | 139.0 | 178.5 | 228.8 | 293.1 |
| Services from general government | 726.0 | 871.1 | 1,099.4 | 1,387.6 |

| FORECAST OF GROSS DOMESTIC PRODUCT BY FACTOR INCOME | | | | |
|---|---|---|---|---|
| **(amounts in $billions)** | **1995** | **2000** | **2005** | **2010** |
| **Compensation of employees** | **4,220.2** | **5,400.6** | **6,960.0** | **8,971.8** |
| Wages and salaries | 3,455.3 | 4,421.5 | 5,697.9 | 7,344.8 |
| Disbursements | 3,455.3 | 4,421.5 | 5,697.9 | 7,344.8 |
| Wage accruals less disbursements | 0.0 | 0.0 | 0.0 | 0.0 |
| Supplements to wages and salaries | 764.8 | 979.1 | 1,262.0 | 1,627.0 |
| Employer contributions for social insurance | 363.1 | 464.7 | 598.8 | 771.9 |
| Other labor income | 401.7 | 514.5 | 663.2 | 855.1 |
| **Proprietors' income with IVA and CCA** | **503.8** | **629.7** | **815.2** | **1,053.1** |
| **Rental income of persons with CCA** | **29.1** | **36.0** | **45.9** | **58.5** |
| **Corporate profits with IVA and CCA** | **575.5** | **729.3** | **947.2** | **1,224.0** |
| Profits before tax | 555.5 | 698.9 | 905.5 | 1,167.3 |
| Profits tax liability | 215.3 | 276.4 | 354.3 | 453.8 |
| Profits after tax with IVA and CCA | 360.3 | 452.8 | 592.9 | 770.2 |
| Dividends | 216.8 | 269.2 | 351.2 | 454.7 |
| Undistributed profits with IVA and CCA | 143.5 | 183.6 | 241.6 | 315.5 |
| Inventory valuation adjustment | -20.4 | -23.0 | -26.0 | -29.3 |
| Capital consumption adjustment | 40.5 | 53.4 | 67.7 | 86.0 |
| **Net interest** | **427.6** | **537.3** | **691.6** | **890.4** |
| **National income** | **5,756.2** | **7,332.9** | **9,459.9** | **12,197.8** |
| **Business transfer payments** | **32.5** | **41.7** | **53.4** | **68.4** |
| To persons | 25.0 | 32.0 | 41.1 | 52.6 |
| To rest of the world | 7.6 | 9.7 | 12.4 | 15.8 |
| **Indirect business tax and nontax liability** | **585.7** | **747.7** | **950.5** | **1,208.5** |
| Less: Subsidies less current surplus of govt. enterprises | 0.5 | 0.6 | 0.6 | 0.7 |
| **Consumption of fixed capital** | **761.7** | **996.5** | **1,265.5** | **1,609.8** |
| **Gross national income** | **7,135.7** | **9,118.3** | **11,728.7** | **15,083.9** |
| **Statistical discrepancy** | **-20.2** | **-1.1** | **-1.9** | **-1.7** |
| **Gross national product** | **7,115.5** | **9,117.2** | **11,726.8** | **15,082.2** |
| Less: Receipts of factor income from the rest of the world. | 177.9 | 230.4 | 297.7 | 384.3 |
| Plus: Payments of factor income to the rest of the world. | 190.0 | 245.8 | 317.4 | 409.6 |
| **GROSS DOMESTIC PRODUCT** | **7,127.5** | **9,132.7** | **11,746.5** | **15,107.5** |

**Table A-3**
**FORECAST OF GROSS DOMESTIC PRODUCT BY FACTOR INCOME**

Source: Fiscal Associates Inc. Model using CBO economic assumptions from August 1995.

Note: IVA denotes inventory valuation adjustment and CCA denotes capital consumption adjustment.

**Table A-4**
**FORECAST OF PERSONAL INCOME AND OUTLAYS**

Source: Fiscal Associates Inc. Model using CBO economic assumptions from August 1995.

Note: IVA denotes inventory valuation adjustment and CCA denotes capital consumption adjustment.

| FORECAST OF PERSONAL INCOME AND OUTLAYS | | | | |
|---|---|---|---|---|
| **(amounts in $billions)** | **1995** | **2000** | **2005** | **2010** |
| **HOW PERSONAL INCOME IS EARNED** | | | | |
| Wage and salary disbursements | 3,455.3 | 4,421.5 | 5,697.9 | 7,344.8 |
| Other labor income | 401.7 | 514.5 | 663.2 | 855.1 |
| Proprietors' income with IVA and CCA | 503.8 | 629.7 | 815.2 | 1,053.1 |
| Rental income of persons with CCA | 29.1 | 36.0 | 45.9 | 58.5 |
| Personal dividend income | 203.4 | 251.4 | 326.5 | 418.8 |
| Dividends | 216.8 | 269.2 | 351.2 | 454.7 |
| Less: Dividends received by government | 13.4 | 17.8 | 24.8 | 35.9 |
| Personal interest income | 716.4 | 916.8 | 1,197.1 | 1,563.8 |
| Net interest | 427.6 | 537.3 | 691.6 | 890.4 |
| Interest paid by government | 320.1 | 414.6 | 548.1 | 724.9 |
| Less: Interest received by government | 155.9 | 195.9 | 252.2 | 324.7 |
| Interest paid by persons | 124.5 | 160.8 | 209.6 | 273.2 |
| Transfer payments to persons | 1,024.3 | 1,405.6 | 1,904.8 | 2,581.5 |
| From business | 25.0 | 32.0 | 41.1 | 52.6 |
| From government | 999.3 | 1,373.5 | 1,863.7 | 2,528.9 |
| Less: Personal contributions for social insurance | 296.6 | 379.6 | 489.2 | 630.6 |
| **PERSONAL INCOME** | **6,037.3** | **7,795.8** | **10,161.5** | **13,245.0** |
| **HOW PERSONAL INCOME IS SPENT** | | | | |
| Personal tax and nontax payments | 795.8 | 1,049.2 | 1,331.4 | 1,728.7 |
| Personal outlays | 4,872.2 | 6,255.4 | 8,155.0 | 10,598.7 |
| Personal consumption expenditures | 4,736.7 | 6,080.5 | 7,927.4 | 10,302.4 |
| Interest paid by persons | 124.5 | 160.8 | 209.6 | 273.2 |
| Personal transfer payments to rest of the world (net) | 11.0 | 14.1 | 18.0 | 23.1 |
| Personal saving | 369.3 | 491.2 | 675.1 | 917.5 |
| **PERSONAL TAXES, OUTLAYS, AND SAVINGS** | **6,037.3** | **7,795.8** | **10,161.5** | **13,245.0** |

| RECONCILIATION OF INCOME FROM COMMERCE'S NATIONAL INCOME AND PRODUCT ACCOUNTS (NIPA) AND ADJUSTED GROSS INCOME (AGI) FROM IRS | | | | |
|---|---|---|---|---|
| **(amounts in $billions)** | **1995** | **2000** | **2005** | **2010** |
| **Personal income (NIPA)** | **6,037.3** | **7,795.8** | **10,161.5** | **13,245.0** |
| **Less Personal income not in AGI** | **1,885.5** | **2,509.8** | **3,336.5** | **4,437.1** |
| Transfer payments[1] | 826.0 | 1,133.5 | 1,536.1 | 2,081.8 |
| Other labor income except fees | 395.8 | 507.0 | 653.5 | 842.6 |
| Imputed income in personal income | 128.6 | 166.1 | 216.5 | 282.2 |
| Investment income[2] | 281.5 | 305.5 | 339.3 | 386.9 |
| Accounting differences | 93.1 | 120.2 | 156.7 | 204.3 |
| Other personal income[4] | 160.5 | 207.2 | 270.1 | 352.0 |
| **Plus AGI not in personal income** | **720.4** | **947.7** | **1,264.2** | **1,691.3** |
| Social insurance[5] | 296.6 | 379.6 | 489.2 | 630.6 |
| Net gain from sale of assets | 135.9 | 198.4 | 293.8 | 435.0 |
| Taxable private pensions | 189.3 | 244.5 | 318.7 | 415.4 |
| Small business corporation income | 62.6 | 78.7 | 101.9 | 131.3 |
| Other excluded income | 36.0 | 46.5 | 60.7 | 79.1 |
| **Equals: Commerce-derived AGI** | **4,872.2** | **6,233.7** | **8,089.2** | **10,499.2** |
| **AGI as measured by IRS** | **4,239.8** | **5,522.8** | **7,166.7** | **9,301.9** |
| Difference | 632.5 | 710.9 | 922.5 | 1,197.3 |
| as % of Commerce-derived AGI | 13.0% | 11.4% | 11.4% | 11.4% |
| AGI, IRS as % of AGI, Commerce | 87.0% | 88.6% | 88.6% | 88.6% |

## Table A-5 RECONCILIATION OF INCOME FROM COMMERCE'S NATIONAL INCOME AND PRODUCT ACCOUNTS (NIPA)

Forecast from Fiscal Associates, Inc. Model based on the comparison of personal income and AGI as reported by IRS, U.S. Department of Commerce, National Income and Product Accounts Table 8.24.

[1] Except taxable military retirement and taxable government pensions.

[2] Investment income of life insurance carriers and private noninsured pension plans plus investment income received by nonprofit institutions or retained by fiduciaries.

[3] Differences in accounting treatment between NIPA's and tax regulations, net.

[4] Exempt or excluded from adjusted gross income.

[5] Personal contributions for social insurance.

**Table A-6**
**DERIVATION OF PERSONAL SAVING IN ADJUSTED GROSS INCOME (AGI)**

[1] See Appendix Table A-4.

[2] Imputations from U.S. Department of Commerce, National Income and Product Accounts (NIPA), Table 8.18.

[3] Net purchases of buildings and equipment owned and used by nonprofit institutions serving individuals.

[4] Appendix Table A-5.

[5] Equals 95% of Commerce's wages salaries because not all wage earners file returns.

[6] Primarily due to differences in timing and definitions of income.

[7] Ratio of IRS' Other AGI to Commerce's Other AGI times Savings without Imputations.

| DERIVATION OF PERSONAL SAVING IN ADJUSTED GROSS INCOME (AGI) | | | | |
|---|---|---|---|---|
| **(amounts in $billions)** | **1995** | **2000** | **2005** | **2010** |
| Personal saving[1] | 369.3 | 491.2 | 675.1 | 917.5 |
| *Less Net purchases of:*[2] | | | | |
| Owner-occupied housing units | 232.2 | 287.9 | 356.5 | 264.3 |
| Nonprofit capital[3] | 45.0 | 57.4 | 73.3 | 52.1 |
| Margins on owner-built homes | 5.7 | 7.1 | 8.7 | 6.5 |
| *Plus Consumption of:*[2] | | | | |
| Owner-occupied farm capital | 119.5 | 156.8 | 203.2 | 140.8 |
| Owner-occupied nonfarm capital | 3.7 | 4.8 | 6.2 | 4.3 |
| Institutional capital | 30.5 | 39.0 | 49.7 | 35.4 |
| *Equals:* | | | | |
| **SAVINGS WITHOUT IMPUTATIONS** | **240.1** | **339.4** | **495.7** | **305.5** |
| Adjusted gross income as measured by IRS[4] | 4,239.8 | 5,522.8 | 7,166.7 | 4,973.1 |
| *Less:* | | | | |
| Wages and salaries as measured by IRS[5] | 3,282.6 | 4,200.4 | 5,413.1 | 3,795.5 |
| *Equals:* | | | | |
| Other AGI as measured by IRS | 957.2 | 1,322.4 | 1,753.6 | 1,177.6 |
| Adjusted gross income as measured by Commerce[4] | 4,872.2 | 6,233.7 | 8,089.2 | 5,638.5 |
| *Less:* | | | | |
| Wages and salaries as measured by Commerce[1] | 3,455.3 | 4,421.5 | 5,697.9 | 3,995.2 |
| *Equals:* | | | | |
| Other AGI as measured by Commerce | 1,416.9 | 1,812.2 | 2,391.2 | 1,643.2 |
| Ratio of IRS' Other AGI to Commerce's Other AGI[6] | 67.6% | 73.0% | 73.3% | 71.7% |
| **SAVINGS IN AGI[7]** | **162.2** | **247.6** | **363.6** | **218.9** |

# Endnotes

1. Static revenue estimates also provide the starting point for dynamic forecasts.
2. See Gary Robbins and Aldona Robbins, *Cooking the Books: Exposing the Tax and Spend Bias of Government Forecasts*, Institute for Policy Innovation, TaxAction Analysis, Policy Report No. 129, February 1995. Other reports on government estimation methods by Gary and Aldona Robbins include *Playing Politics With Government Forecasts*, IPI Policy Report No. 111, June 1991 and *Prejudicing the Policymaking Process: The Importance of Economic and Budgetary Forecasts*, IPI Policy Report No. 106, September 1990.
3. The latest estimate is in U.S. Department of the Treasury, Office of Tax Analysis, *An Analysis of the New Armey-Shelby Flat Tax Proposal*, Washington, DC, December 29, 1995. The second estimate appears in U.S. Department of the Treasury, Office of Tax Analysis, *A Preliminary Analysis of a Flat Rate Consumption Tax*, Washington, DC, March 10, 1995. The first estimate was cited in Clay Chandler, "Treasury Analysis Finds GOP 'Flat Tax' Too Costly," *Washington Post*, October 31, 1994, p. A8. In its latest study, Treasury claims that the reason for the differences is more complete specification of the proposal.
4. Owner-occupied housing does pay property taxes at the state and local level.
5. The Commerce Department also includes some measures not generally related to the income of persons such as the implicit income from owner-occupied housing and capital expenses originating in the institutional sector.
6. Congressional Budget Office, *Economic and Budget Outlook: Fiscal Years 1996-2000*, Washington, DC: U.S. Government Printing Office, January 1995. Changes made in the mid-year update also were incorporated.
7. Between 1947 and 1994, private saving averaged 12.9 percent of aftertax (or disposable) income. Today it is considerably below that average at only 7 percent. See Gary and Aldona Robbins, *Eating Out Our Substance: How Taxation Affects Saving*, Lewisville, TX: TaxAction Analysis, Policy Report No. 131, August 1995.
8. Gary and Aldona Robbins, *The Truth About Falling Wages*, TaxAction Analysis, Economic Scorecard, Third Quarter 1995.
9. Gary and Aldona Robbins, *Looking Back to Move Forward: What Tax Policy Costs Americans and the Economy*, Lewisville, TX: Tax Action Analysis, Policy Report No. 127, September 1994.

10. Some mistakenly attribute the double taxation of capital to the existence of a corporate and personal income tax. However, even if there were only the personal income tax, capital would still be taxed twice if the accumulation and returns from saving were taxed. Conversely, it is possible to maintain a business and individual tax without doubly taxing saving and investment, as is done in the Nunn-Domenici and Armey-Shelby tax reform proposals.
11. Gross receipts less purchases of goods (investment and intermediate goods) is value-added as defined by the Commerce Department. The alternative measure of value-added is to add up the income going to the various factors producing the output.
12. The Nunn-Domenici proposal deals with progressivity by using graduated tax rates. Rates hit 40% for $24,000 of taxable income on a joint return and $14,400 for singles.
13. The Nunn-Domenici tax proposal exempts households, nonprofit institutions and government.
14. Robert E. Hall and Alvin Rabushka, *The Flat Tax*, 2nd edition, Stanford, CA: Hoover Institution Press, 1995.
15. A bill based on the Hall-Rabushka flat tax has been introduced by Majority Leader Dick Armey and Senator Richard Shelby. Their bill provides for generous personal exemptions and standard deductions that would amount to $31,400 for a family of four.
16. The value of financial services to persons, which was taken out as an imputation, is added back so that the financial services provided by financial institutions would be taxed.
17. A draft bill by Representatives Schaefer and Tauzin would rebate the tax to lower income persons. The draft bill proposes a $3,825 rebate for a family of four.

## About the Authors

Gary Robbins is President of Fiscal Associates, an Arlington, VA-based economic consulting firm, and John M. Olin Senior Research Fellow of IPI. Mr. Robbins has developed a general equilibrium model of the U.S. economy that specifically incorporates the effects of taxes and government spending. He was Chief of the Applied Econometrics Staff at the U.S. Treasury Department from 1982 to 1985. He served as assistant to the Under Secretary for Tax and Economic Affairs from 1981 to 1982, and as Assistant to the Director of the Office of Tax Analysis from 1975 to 1981. Recent publications include IPI Policy Report #124: *Putting Capital Back to Work for America*, and IPI Policy Report #127: *Looking Back to Move Forward: What Tax Policy Costs Americans and the Economy*. Mr. Robbins' articles and analysis frequently appear in the financial press. He received his master's degree in Economics from Southern Methodist University.

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