

Summary: Meaningful tax reform requires a better understanding of how taxes interact with the economy. Whether its called an income tax, a payroll tax, a sales tax, a consumption tax, a business tax or a property tax, all taxes are paid out of the income people earn with their labor and capital. The current tax code needlessly hampers the economy because marginal tax rates exceed average tax rates. The method of accounting presented here offers a starting point to assess how well proposals for tax reform measure up to the current system and to each other.

QUICK STUDY

HOW THE CURRENT TAX SYSTEM WORKS

Foundations for Tax Reform

By Gary and Aldona Robbins, IPI Senior Research Fellows

Growing dissatisfaction over record tax burdens, the complexity of the present code, and a meager consumer savings rate should make tax reform a high priority for the administration and Congress. But if policymakers and the public do not understand how taxes affect the economy, efforts to reform the system could easily fail.

This study is the first in a series that will provide a foundation for tax reform by examining the current situation, charting the ultimate destination, and delineating the best way to get from here to there. A look at the present tax system begins with how goods and services are produced and sold in the economy. Next is an analysis of different ways to measure total economic activity with special focus on the compensation of factors. Last, this information is used to estimate the average and marginal tax rates on labor and on capital imposed by the current tax system.

PART I: HOW THE ECONOMY WORKS: THE CIRCULAR FLOW

The circular flow of income and output describes the basic workings of a market economy in which people both produce and consume goods and services. Businesses produce goods and services. Households not only consume those goods and services but also provide labor and capital.

In the simplest form, it is a barter relationship. Businesses trade goods and services to acquire labor and capital from households. There are two flows—the real goods and service that businesses produce and the labor and capital that households provide. Both flows are equal in value and they measure the same thing—total economic activity.

Introducing money into a market economy makes it easier for households and businesses to conduct transactions. It also doubles the number of flows so that total economic activity can now be expressed as:

- the real flow of goods and services produced by businesses and consumed by households
- the money households spend to purchase those goods and services from businesses
- the real flow of factor services from households to businesses
- the compensation businesses pay to households for their labor and capital inputs.

Each of the four flows depicts what is happening in the economy at any one point in time. But regardless of perspective, the total value of activity going in one direction mirrors the total value of activity flowing in the other. [See Chart 1]

This is an extremely important point. A dollar's worth of goods produced (real flow) is the same as a dollar spent to buy those goods (money flow). From the standpoint of total economic activity, it counts as one dollar, not two. Similarly, a dollar's worth of factor services (real flow) is the same as a dollar spent to compensate labor and capital for those services (money flow). Again, it counts as only one unit of economic activity.

GOVERNMENT ENTERS THE PICTURE

The third key player in the circular flow is government, which imposes taxes, purchases goods and services, and provides transfers and subsidies. The addition of

government makes the circular flow analysis much more complex so the best approach is to focus solely on the money flows.

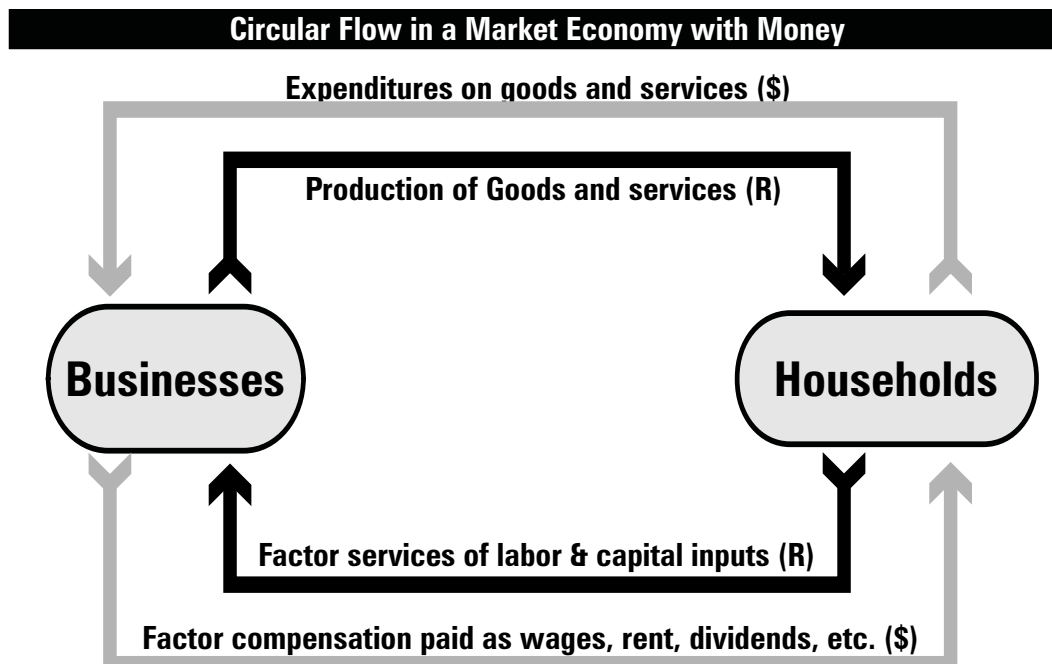
Government obtains its revenue by taxing the income that flows between households and businesses. For example, sales taxes divert income from expenditures flowing from households to businesses. Payroll taxes divert income from labor compensation flowing from businesses to households. Taxes levied on businesses reduce the factor compensation that would otherwise go to households. Taxes levied on households lower the compensation for labor and capital services.

Government uses tax revenues three ways. It can purchase goods and services, which enter into the expenditure flow going to business. It can hire labor services, which enter into the compensation flow going to households. Or it can make transfers to businesses and households in the form of welfare payments or subsidies. The central fact is that government interacts with businesses and households at numerous points in the circular flow, and in doing so siphons off income that otherwise would go to those who produce the economy's output.

PART II: MEASURING ECONOMIC ACTIVITY

The basic data that measures gross domestic product (GDP) comes from the Commerce Department's *National Income and Product Accounts (NIPA)*. To better reflect how taxes affect economic activity, we have rearranged NIPA and developed a set of National Tax Accounts.

Chart 1



Total economic activity can be measured using any of the flows depicted in Chart 1. Whether measured in terms of what was sold (Expenditures), what was produced (Production), or how much labor and capital were compensated for their services (Factor Compensation), GDP amounted to \$9.3 trillion in 1999.

GDP as expenditures is the final sales on four broad categories of goods and services. The biggest category – personal consumption – accounted for two-thirds of GDP. The rest went to investment (17.5%), government purchases (17.6), and the difference between imports (13.5%) and exports (10.8%).

GDP also can be represented as the value of production in the major sectors. Private businesses accounted for three-fourths of GDP (75.8%). The rest remainder came from domiciles and institutions (11.3%), general government (11%), and government enterprises (1.9%).

The factor compensation method measures GDP in terms of what was paid for the services of the labor and capital used in production. Labor compensation accounted for 60 percent of GDP and capital for 40 percent. But, not all of that compensation made it back to the households that provided the labor and capital services. Some was diverted to government in taxes. Corporate income taxes, the employer share of payroll taxes, and indirect business taxes like sales, excise and property taxes – reduced labor and capital compensation by almost \$1.3 trillion, or 13.7 percent of GDP. Government collected another \$1.5 trillion from individuals in personal income taxes and the employee share of payroll taxes.

PART III: TAX RATES UNDER THE CURRENT SYSTEM

Federal, state, and local governments impose taxes at a number of points in the economy. Businesses write checks for corporate income taxes, excise and other indirect business taxes, and the employer portion of social insurance taxes. Individuals pay personal income taxes and the employee share of payroll taxes. Ultimately, these taxes are paid out of the income earned by the factors—capital and labor—that produced the real goods and services sold in the marketplace.

While people talk about taxing “consumption” or “wealth,” the simple fact is that taxes can be paid only out of income. When government taxes the purchase of clothing, it does not accept a shirt or pair of socks as payment, but part of the total purchase price that would otherwise go to the producer, and ultimately to labor and

capital, goes to government. In other words, taxes raise the cost of producing goods and services and reduce the take-home pay of workers and the return to owners of capital. Because factor payments—wages, dividends, interest, profits, etc.—are the only tax bases that government can draw upon, all taxes are paid out of the income going to capital and labor.

IDENTIFYING TAXES ON LABOR AND CAPITAL

In 1999, government at all levels collected taxes from the income of labor and capital amounting to \$2.7 trillion. Because almost two out of every three dollars of income generated in the economy arises from labor services, 61 percent of these taxes fell on income earned from labor and 39 percent on income earned from capital. Federal taxes counted for two-thirds of the total. Because of the sizable payroll tax needed to fund Social Security and Medicare, 71.4 percent of federal taxes were paid out of labor income. Labor and capital in private business, which accounts for three-fourths of the economy, paid 90.5 percent of the federal tax tab.

TAX RATES ON LABOR AND CAPITAL

On average, taxes reduce the income that would otherwise go to workers in private business by one-third. Domestic workers and those in nonprofit institutions face average tax rates of around 25 percent. Government and government enterprise workers are taxed about 15 percent.

Taxes claim almost half the income that would otherwise go to the savers, investors, and entrepreneurs who provide capital services to the private sector. More than a fourth of the capital income imputed to nonprofits goes to taxes, primarily property taxes. Homeowners pay almost 9 percent of the imputed value of their homes, with federal subsidies offsetting more than half of state and local property taxes. Neither capital in government enterprises nor capital in general government pays any tax.

For the private sector as a whole, taxes amount to 38.5 percent of total factor income. That’s nearly 39 cents out of every dollar of goods and services produced, with two-thirds going to the federal government.

MARGINAL TAX RATES ARE EVEN HIGHER

While average tax rates are high, marginal rates—the tax on the next dollar of income produced by working or running a machine another hour—are even higher. Marginal tax rates are especially important because prices depend on the cost of producing the last, not the average, unit of output.

Marginal tax rates on labor are roughly a third higher than the average rates. In 1999, workers in the private sector had to give back 44.4 percent in taxes out of their next dollar of labor income. Marginal tax rates on capital income are about a fourth higher than the average rates. Out of an extra dollar earned by private capital, 60.6 cents went to cover taxes versus 49.1 cents out of the average dollar. Moreover, marginal tax rates on capital are about a third higher than those on labor.

Combining the marginal rates of both factors, taxes claim 50 cents out of every dollar in additional economic activity. Put another way, taxes make up half the costs of producing an extra unit of U.S. output.

ECONOMIC IMPLICATIONS OF CURRENT TAX RATES

The current system of federal, state, and local taxes adversely affect the economy in at least two ways. First, both capital and labor pay higher rates on the next dollar of income than on the average dollar. Average tax rates decide the government's tax take but marginal tax rates influence decisions to work, produce, and invest. The more marginal tax rates exceed the averages, the less the economy will use labor and capital and the less output will be produced. A smaller economy means lower incomes and tax revenues.

Another inefficiency occurs if one factor is taxed more heavily than another. Because capital is taxed more heavily than labor, producers use less capital than they would if marginal rates on capital were the same, leading to a less efficient mix of resources and lower output.

CONCLUSIONS

Taxes take more than one-third of what the U.S. economy produces. But, largely due to graduated income tax schedules, marginal rates claim almost half of the increases in output. While average rates determine what government will collect, economic expansion depends on the cost of producing the last unit. In other words, marginal tax rates that exceed average rates deter growth without bringing any additional revenue.

While American workers pay a lot in taxes, American capital pays even more. Ideally, technology and input costs, not taxes, should decide how much labor and capital are used. With taxes on capital about 40 percent higher than those on labor, our economy is not using the best mix of inputs. Taxing labor and capital at the same rate would lower production costs, improve economic efficiency, and increase output.

But even if capital and labor were taxed at the same rate, there could still be problems. The critical issue of what is being taxed, that is, what is in the tax base, will be the topic of the next report in the series.

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