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Saving Rates in the United States: Calculation and Comparison

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Summary

The amount of money saved has important economic consequences. Nationally, the amount of saving determines how much can be invested and ultimately the size of the capital stock. Increasing the size of the capital stock is believed to be one way to raise the productivity of the labor force. Individually, saving is critical to accumulating sufficient wealth to maintain living standards after retirement. This report explains how national saving is measured, presents recent estimates of saving rates in the United States, and, for comparison, provides those of other major industrial countries. This report will be updated periodically.

Introduction

Anyone with income and a future must decide how much to spend and how much to save. Individuals may save a fraction of their income for precautionary reasons, as well as to provide for themselves in retirement. Businesses retain a fraction of their profits in order to finance new investments. Governments save (or dis-save) as a consequence of policy decisions about how much to tax and how much to spend.

The amount of money saved as a nation has important economic consequences. If individuals save too little during their working lives to avoid falling living standards in old age, that may influence policymakers' views about the appropriate level of Social Security taxes and benefits. National saving, the sum of individual, business, and public saving, has important consequences for the balance of trade, economic growth, and future standards of living.[1]

Although economic theory gives no reason to prefer one saving rate to another, it may still be useful to examine trends in saving and to compare U.S. saving rates with those in other countries. This report provides a brief explanation of how saving is

[1] For a discussion of public policy and saving, see CRS Report RL32119, *Can Public Policy Raise the Saving Rate?*, by Brian W. Cashell.

measured, and it provides current data on saving rates in the United States and for selected foreign countries.

Measuring Saving

Saving, in a nutshell, is income minus consumption. In an economic sense, however, consumption is not the same as expenditures. Translating the theoretical notion of saving into a statistical measure is a challenge.

The source for U.S. saving data is the national income and product accounts (NIPA) published by the Department of Commerce, Bureau of Economic Analysis (BEA). The NIPA constitute the accounting framework which is used to produce estimates of gross domestic product (GDP). GDP is the total value of goods and services produced, and it can be calculated in two different ways. One way is to add up the value of all the goods and services produced (the product side of the accounts), and the other way is to add up all of the income earned in the production of those goods and services (the income side of the account).

On the product side, GDP is the total value of those goods and services produced for personal consumption (C), investment (I), government (G), as well as for export (X). On the income side, the income earned in the production of those goods and services can be accounted for as consumer spending (C), taxes (T), private saving (S), and spending for imported goods and services (M).

Since each of these approaches measure the same variable (GDP), they can be set equal to each other, in this way:

$$C + I + G + X = C + T + S + M$$

Subtracting consumption (C) from both sides simplifies the equality:

$$I + G + X = T + S + M$$

This can now be rearranged by subtracting government spending (G) and exports (X) from both sides, which gives:

$$I = S + (T - G) + (M - X)$$

This equation illustrates the importance of saving. Total investment is equal to the sum of private saving (S), public saving (T-G), and the net inflow of capital from abroad (M-X).[2]

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[2] Just as there is a balance between the income and product sides of the NIPA, there is a balance in international payments. If Americans buy more goods and services from abroad than they export, then (at least in this simplified example) the net outflow of dollars will be used by foreigners to buy dollar-denominated assets, which thus helps to finance domestic investment.

Gross and Net Saving

In the broadest sense, saving is income less consumption. Consumption is typically taken to mean spending on goods and services by households. But consumption can also refer to the wear and tear (depreciation, or capital consumption) on the capital stock that occurs in the production of those goods and services. Thus, some saving must be allocated to the replacement of the existing capital stock as it wears out. Only if saving is more than sufficient to replace the existing capital stock as it wears out can the capital stock grow.

For this reason, saving data distinguish between "gross" and "net" saving. The difference between the two measures is the estimated deterioration in the existing capital stock. In some cases, such as computers, capital may be completely depreciated in a very short period of time, whereas in others, such as buildings or heavy equipment, capital may take a long time to wear out.

Saving and Economic Growth

Economic growth, in the long run, is determined by three factors: the growth rate of the labor force; the rate of technological progress; and the rate of growth of the capital stock. The productivity of the labor force depends on both the level of technology and the size of the capital stock. The more capital there is, the more productive the labor force can be. The size of the capital stock, in turn, depends on the rate of investment.

Investment must equal saving. The amount that can be invested depends on the amount of saving. Saving more can lead to increased investment, resulting in a larger stock of capital and higher levels of productivity. Consuming less now enables more consumption in the future.

Thrift is considered by many to be a virtue, but economic theory gives no reason to prefer one saving rate over another. The amount saved is seen simply as a reflection of the trade off made between a desire to consume now and a willingness to consume less than one's current income to provide resources for the future.

Historical Saving Data

Table 1 presents historical estimates of U.S. saving rates since 1997. The data in the top third of the chart relate to the contribution of the private sector (personal or household saving, and business saving) to national saving, followed by data indicating the saving of the public sector, with separate accounting for the federal and state and local government. The bottom third of the table shows both total gross and net national saving, the amount of saving imported from abroad, and total investment as a percentage of gross domestic product.

Table 1. Accounting for Saving in the United States

(all figures as a percentage of gross domestic product)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Gross Personal saving	2.6	3.2	1.7	1.7	1.3	1.8	1.6	1.6	0.3	0.5	0.4
Gross Business saving	13.1	12.0	12.6	11.9	12.5	13.1	13.2	13.6	14.6	14.1	13.3
Private Capital Consumption	9.6	9.7	9.9	10.1	10.6	10.3	10.2	10.3	10.9	10.3	10.4
Gross Private Saving	15.7	15.2	14.3	13.6	13.8	14.9	14.8	15.2	14.9	14.6	13.7
Net Private Saving	6.1	5.5	4.5	3.5	3.2	4.6	4.6	4.8	3.9	4.3	3.3
Gross Federal Saving	0.3	1.4	2.0	2.8	1.3	-1.5	-2.6	-2.4	-1.6	-0.7	-0.9
Federal Capital Consumption	1.0	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8
Net Federal Saving	-0.7	0.4	1.1	1.9	0.5	-2.4	-3.4	-3.2	-2.3	-1.5	-1.7
Gross S&L Government Saving	1.6	1.7	1.6	1.6	1.2	0.8	1.0	1.2	1.5	1.6	1.4
S&L Capital Consumption	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.3
Net S&L Saving	0.5	0.6	0.5	0.5	0.0	-0.3	-0.2	0.0	0.2	0.4	0.1
Gross Public Saving	1.9	3.1	3.7	4.4	2.5	-0.7	-1.6	-1.2	-0.1	0.9	0.5
Net Public Saving	-0.2	1.0	1.7	2.4	0.5	-2.7	-3.6	-3.2	-2.1	-1.2	-1.6
Gross National Saving	17.6	18.3	18.1	18.0	16.4	14.2	13.3	13.8	14.8	15.5	14.2
Net National Saving	5.9	6.5	6.2	5.9	3.7	1.9	1.1	1.6	1.9	3.1	1.7
Net Foreign Investment	1.3	2.1	3.0	4.0	3.7	4.4	4.7	5.3	5.7	5.9	5.2
Total Gross Domestic Investment	18.9	20.4	21.0	22.1	20.0	18.6	18.0	19.2	20.6	21.3	19.4

Source: Department of Commerce, Bureau of Economic Analysis.

International Comparisons

Although no particular saving rate is prescribed by economic theory, the case for saving more is sometimes argued on the grounds that either less is saved now than in prior years, or that the current saving rate is below that of other countries. **Table 2** presents data showing how national saving in the United States compares with that in other major industrial countries. These data differ somewhat from those presented in **Table 1** because the Organization for Economic Co-operation and Development (OECD) uses a different set of economic accounting rules, and because the OECD data are not revised on the same schedule as the NIPA data.

Table 2. Gross National Saving for Selected Countries

(as a percentage of gross domestic product)

	United States	Canada	France	Germany	Italy	Japan	United Kingdom
1996	16.1	18.8	18.7	20.5	22.2	29.7	16.3
1997	17.3	19.6	19.9	20.7	22.2	29.8	17.4
1998	18.0	19.1	21.0	20.9	21.6	28.8	18.3
1999	17.8	20.7	21.8	20.3	21.1	27.2	16.0
2000	17.7	23.6	21.6	20.2	20.6	27.5	15.4
2001	16.1	22.2	21.3	19.5	20.9	25.8	15.6
2002	13.9	21.2	19.8	19.4	20.8	25.2	15.8
2003	12.9	21.4	19.1	19.5	19.8	25.4	15.7
2004	13.4	22.8	19.0	21.5	20.3	25.8	15.9
2005	13.5	23.7	18.5	21.8	19.6	26.8	15.1
2006	13.7	24.3	19.1	23.0	19.6	26.6	14.9

Source: Organization for Economic Co-operation and Development.

Over the period shown, Japan saved at a higher rate than any of the other countries, although its saving rate has been falling. The United Kingdom and the U.S. saving rates were the lowest of these seven countries.

Table 3 presents data comparing historical household saving rates for the same countries. The OECD household saving data are based on the most recent internationally comparable data.

Table 3. Household Saving for Selected Countries

(as a percentage of gross domestic product)

	United States	Canada	France	Germany	Italy	Japan	United Kingdom[a]
1996	4.0	7.0	11.9	10.5	17.9	10.6	9.4
1997	3.6	4.9	12.8	10.1	15.1	10.3	9.5
1998	4.3	4.9	12.4	10.1	11.4	11.3	7.0
1999	2.4	4.0	12.1	9.5	10.4	10.0	5.3
2000	2.3	4.7	12.0	9.2	8.5	8.6	5.1
2001	1.8	5.2	12.7	9.4	10.5	5.0	6.4
2002	2.4	3.5	13.8	9.9	11.4	4.9	5.0
2003	2.1	2.6	12.7	10.3	10.4	3.9	4.9
2004	2.1	2.9	12.6	10.4	10.4	3.5	3.7
2005	0.5	1.6	11.8	10.5	10.0	3.9	5.6
2006	0.4	2.3	11.9	10.5	8.7	3.3	4.8
2007	0.4	1.5	12.7	10.9	6.8	3.1	2.9

Source: Organization for Economic Co-operation and Development.

a. The United Kingdom reports gross saving, the others are net saving rates.