A NEW ARCHITECTURE FOR THE U.S. NATIONAL ACCOUNTS

by

Dale W. Jorgenson

Samuel W. Morris University Professor

Harvard University

August 26, 2008

Richard and Nancy Ruggles Memorial Lecture

30th General Conference of the

International Association for Research in Income and Wealth

Portoroz, Slovenia

A NEW ARCHITECTURE FOR THE U.S. NATIONAL ACCOUNTS

by

Dale W. Jorgenson[1]

Abstract. The key elements of a new architecture for the U.S. national accounts have been developed in a prototype system constructed by Dale W. Jorgenson and J. Steven Landefeld, Director of the Bureau of Economic Analysis, U.S. Department of Commerce. The focus of the U.S. national accounts is shifting from economic stabilization policy toward enhancing the economy's growth potential. Another important motivation for the new architecture is to integrate the different components of the decentralized U.S. statistical system and make them consistent. (JEL Classification: E01.)

This paper describes a new architecture for the U.S. national accounts.[2] The first question to be addressed is, why do we need a new architecture? In this context "architecture" refers to the conceptual framework for the national accounts. An example is the seven-account system recently introduced by the Bureau of Economic Analysis (BEA).[3] A second example is the United Nations' 1993 System of National Accounts (1993 SNA).[4] Both provide elements of a complete accounting system, including production, income and expenditures, capital formation, and wealth accounts. The purpose of such a framework is to provide a strategy for developing the national accounts.

The basic architecture of the U.S. national accounts has not been substantially altered in fifty years. The national accounts were originally constructed to deal with issues arising from the Great Depression of the 1930s, focusing on the current state of the economy.[5] In the meantime, the focus of U.S. monetary and fiscal policies has shifted from economic stabilization to enhancing the economy's growth potential. In addition, the U.S. economy is confronted with new challenges arising from rapid changes in technology and globalization. Meeting these challenges will require a new architecture for the U.S. national accounts.

---

[1] Samuel W. Morris University Professor, Harvard University, and Chairman, Bureau of Economic Analysis Advisory Committee. More information about the author is available from: http://www.economics.harvard.edu/faculty/jorgenson/.

[2] Financial support for this research by the Alfred P. Sloan Foundation and the Donald B. Marron Fund for Research at Harvard University is gratefully acknowledged. Thanks are due to Jon Samuels for excellent research assistance.

[3] The BEA's seven-account system is summarized in Jorgenson and Landefeld (2006).

[4] United Nations, Commission of the European Communities, International Monetary Fund, Organisation for Economic Cooperation and Development, and the World Bank (1993). Implementation of the SNA in Australia, Canada, and the United Kingdom is described in Karen Wilson (2006).

[5] See Landefeld (2000) on the origins of the U.S. national accounts.

The objective of the new architecture is to accelerate the development of new economic data for the resolution of policy issues involving long-term growth. Significant examples include public and private provision for retirement income and the outlook for health care expenditures and public programs to cover health care costs. The public programs for retirement income and health care are critical elements of the long-term outlook for the U.S. federal budget. Other important examples include broadening the concept of investment to include investment in human capital through education and training and investment in intangible assets such as research and development.

America's economy is large and diverse. It is not surprising that accounting for the vast range of economic activities requires a decentralized statistical system. The major agencies involved in generating the national accounts include the Bureau of Economic Analysis (BEA) in the Department of Commerce, the Bureau of Labor Statistics (BLS) in the Department of Labor, and the Board of Governors of the Federal Reserve System (FRB). The Census Bureau, also in the Department of Commerce, and the Statistics of Income (SOI) division of the Internal Revenue Service in the Department of the Treasury are major sources of primary data. Many other public agencies and private sector organizations provide data for the national accounts.

Without being exhaustive it is useful to enumerate some of the key assignments of the leading contributors to the U.S. national accounts. BEA has responsibility for the core system of accounts, the National Income and Product Accounts (NIPAs). BLS generates employment statistics, wage and salary data, and productivity statistics, as well as almost all of the underlying price information. FRB produces the Flow of Funds Accounts, including income statements and balance sheets for major financial and non-financial sectors. The Census Bureau collects and reports much of the primary information through its business and population censuses and surveys. SOI generates tax-based data on individual and corporate incomes.[6]

The national income and product accounts, the productivity statistics, and the flow of funds have different origins, reflecting diverse objectives and data sources. However, they are intimately linked. For example, the BLS productivity statistics employ data on output, income, and investment from the NIPAs. The flow of funds incorporates BEA data on investment and stocks of tangible and reproducible assets and the U.S. International Investment Position. An important part of the motivation for a new architecture is to integrate the different components and make them consistent.

As an illustration, both BEA and BLS measure industry output.[7] BEA's estimates are used to allocate the gross domestic product to individual industries. BLS's estimates of output are employed in measures of industry-level productivity growth. Unfortunately, the BEA and BLS estimates of industry output do not coincide. An important objective of

[6] The extensive documentation available for the U.S. national accounts, much of it on line, is described in Jorgenson and Landefeld (2006, pp. 107-109). A recent summary is provided in Landefeld, Seskin, and Fraumeni (2008).

[7] BEA and BLS measures of industry output have been compared in detail by Fraumeni, Harper, Powers, and Yuscavage (2006).

the new architecture is to integrate the data sources employed by BEA and BLS in order to arrive at a common set of estimates. This is a crucial ingredient in long-term projections of the U.S. economy. These depend on disparate trends in productivity growth in key industries, such as information technology producers and intensive users of information technology.

As a second illustration, FRB generates a measure of national saving from the income statements and balance sheets that comprise the Flow of Funds Accounts. BEA produces an estimate of national saving from the income and product accounts. Although both estimates agree that the saving rate has declined sharply since 2000, they employ different data sources and sometimes arrive at conflicting results. An important goal of the new architecture is to bring the flow of funds and the national income accounts into consistency in order to provide better data for anticipating future financing needs of both public and private sectors.[8] A further step will be to integrate the income and expenditures accounts with sector balance sheets.

A third, and final illustration is the estimates of health expenditures presented in the National Health Expenditures Accounts, compiled and published by the Centers for Medicare and Medicaid Services (CMS).[9] BEA also provides estimates of health expenditures as components of Personal Consumption Expenditures and Government Consumption Expenditures. However, the two systems of accounts are based on different concepts and data sources and give different estimates. An effort to reconcile the two alternative systems of accounts for health expenditures is under way at CMS and BEA.[10] This is essential for long-term projections of health care expenditures and the financial requirements for U.S. government programs such as Medicaid and Medicare.

The foregoing review identifies a clear need to update, integrate, and extend the U.S. system of national accounts. The first and most important objective is to make the NIPAs consistent with the accounts for productivity compiled by BLS and the Flow of Funds Accounts constructed by FRB. The boundaries of production, income and expenditures, accumulation, and wealth accounts must be made identical in order to achieve consistency throughout the system. Development of a fully integrated and consistent system of accounts will require close collaboration among BEA, BLS, and FRB, as well as coordination with Census, the most important agency for generating primary source data.

1. The New Architecture.

The key elements of the new architecture are outlined in a "Blueprint for Expanded and Integrated U.S. Accounts," by Jorgenson and Landefeld.[11] They present a

---

[8] BEA national income and FRB flow of funds data on income and expenditure have been integrated within the framework of the 1993 SNA by Teplin, Antoniewicz, McIntosh, Palumbo, Solomon, Mead, Moses, and Moulton (2006).

[9] The National Health Expenditures Accounts are described on the CMS website: www.cms.hhs.gov/NationalHealthExpendData/.

[10] An earlier reconciliation was attempted by Sensenig and Wilcox (2001).

[11] See Jorgenson and Landefeld (2006)

prototype system that integrates the national income and product accounts with productivity statistics generated by BLS and balance sheets produced by FRB. The system features gross domestic product (GDP), as does the National Income and Product Accounts; however, GDP and gross domestic income (GDI) are generated along with productivity estimates in an internally consistent way. The balance sheet covers the U.S. economy as a whole and fills a gap in the existing Flow of Funds Accounts.

Issues in measuring productivity were considered by a Statistical Working Party of the OECD Industry Committee, headed by Edwin Dean, former Associate Commissioner for Productivity and Technology of the U.S. Bureau of Labor Statistics. The Working Party established international standards for productivity measurement at both aggregate and industry levels. The results are summarized in Paul Schreyer's OECD *Productivity Manual*, published in 2001. Estimates of multifactor productivity of the prototype system developed by Jorgenson and Landefeld conform to the international standards presented in Schreyer's *Productivity Manual.*

In integrating the components of the U.S. national accounts, the first question to be addressed is, why not use the 1993 SNA? BEA income and expenditures data and FRB flow of funds data have been integrated within the framework for 1993 SNA by Albert Teplin, *et al.* This initial effort has been followed by an annual update, published in the *Survey of Current Business*, BEA's monthly journal, and available on the BEA website.[12] SNA-USA is not the only effort at BEA to provide the U.S. national accounts in the 1993 SNA format. The U.S. national accounts are reported annually to the OECD in this format and the results are published in the OECD's internationally comparable national accounts.[13]

The 1993 SNA is part of the new architecture, since it embodies the collective experience of the national accounting community and is familiar to many people working on the U.S. national accounts. However, the SNA 1993 does not provide the income and production accounts in current and constant prices needed in the new architecture. Also, consistency of the boundaries among the various component accounts is an unresolved issue in the 1993 SNA. Wealth, for example, refers to a different set of economic units than income and product.[14] The prototype system of Jorgenson and Landefeld begins with the NIPAs and generates the income and product accounts in constant prices as well as current prices.

The production accounts provide a unifying methodology for integrating the NIPAs generated by BEA and the productivity statistics constructed by BLS. The production accounts can be generated at both aggregate and industry levels and provide the missing connection to the productivity statistics. Adding productivity statistics to the

[12] The most recent annual update is presented by Bond, Martin, McIntosh, and Mead (2007).
[13] Details on the U.S. national accounts in 1993 SNA format are presented by Mead, Moses, and Moulton (2004).
[14] A program to update the 1993 SNA is scheduled for completion in 2008 and 2009. A report on the revision is presented by the United Nations Statistical Commission (2007). Proposals for revision of the 1993 SNA are discussed by Moulton (2004).

national accounts remedies a critical omission in the NIPAs and the 1993 SNA. Similarly, BEA's accounts for reproducible assets and the U.S. International Investment Position can be extended to encompass a balance sheet for the U.S. economy as a whole, now absent from the NIPAs and the Flow of Funds Accounts.

An important advantage of beginning with the NIPAs is that the impact of globalization on the U.S. economy is reflected in BEA's system of international accounts. This system includes the Foreign Transactions Current Account, which records imports and exports, as well as receipts from the Rest of the World (ROW), payments to the ROW, and the balance on current account. The international accounts also include the Foreign Transactions Capital Account, which registers net lending and borrowing from the United States to the ROW. Finally, the U.S. International Position includes U.S. assets abroad and foreign-owned assets in the United States. These accounts are generated by BEA and incorporated into the Flow of Funds Accounts by FRB.[15] BEA's international accounts are undergoing substantial improvements intended to enhance the quality of information available to policy makers dealing with globalization.[16]

Other important advantages of beginning with the NIPAs are that the existing U.S. national accounts can be incorporated without modification and that improvements in the NIPAs can be added as they become available. For example, BEA is currently engaged in a major program to improve the existing system of industry accounts and accelerate the production of industry data by 2008.[17] This program will integrate the NIPAs with the Annual Input-Output Accounts and the Benchmark Input-Output Accounts produced every five years. Improvements in the source data are an important component of this program, especially in measuring the output and intermediate inputs of services.[18] The Census Bureau has generated important new source data on intermediate inputs of services and BLS has devoted a major effort to improving the service price data essential for measuring output.[19]

The major challenge in implementing a consistent and integrated production account is the construction of a measure of GDI in constant prices. The 1993 SNA and BLS (1993) have provided appropriate measures of the price and quantity of labor services. These can be combined with the price and quantity of capital services introduced by BLS (1983) to generate price and quantity indexes of GDI, as well as multifactor productivity. The primary obstacle to constructing of capital service measures is the lack of market rental data for different types of capital. Although rental markets exist for most types of assets, such as commercial and industrial real estate and equipment, relatively little effort has been made to collect rental prices, except for renter-occupied housing.

---

[15] Additional detail on BEA's system of international accounts is provided in the international section of the BEA website: bea.gov/bea/dil.htm.
[16] See Kozlow (2006).
[17] The BEA industry program is described by Lawson, Moyer, Okubo, and Planting (2006) and Moyer, Reinsdorf, and Yuscavage (2006).
[18] This is the subject of important research by Triplett and Bosworth (2004). An update is presented in Triplett and Bosworth (2006).
[19] See the Panel Remarks by Mesenbourg (2006) and Utgoff (2006).

An alternative approach for measuring rental prices, employed by BLS, is to impute these prices from market transactions prices for the assets, utilizing the user cost formula introduced by Jorgenson (1963). This requires estimates of depreciation and the rate of return, as well as asset prices based on market transactions. Measures of asset prices and depreciation, as well as investment and capital stocks, are presented in BEA's (2003) reproducible wealth accounts. BLS has generated estimates of the rate of return by combining property income from the NIPAs with capital stocks derived from BEA's estimates of investment. BLS employs the imputed rental prices as weights for accumulated stocks of assets in generating price and quantity measures of capital services.

The most important innovation in the prototype system of national accounts developed by Jorgenson and Landefeld is to include prices and quantities of capital services for all productive assets in the U.S. economy. The incorporation of the price and quantity of capital services into the revision of the 1993 SNA was approved by the United Nations Statistical Commission at its February-March 2007 meeting. A draft of Chapter 20 of the revised SNA, "Capital Services and the National Accounts," is undergoing final revisions and will be published in 2009. Paul Schreyer, head of national accounts at the OECD, has prepared an OECD Manual, *Measuring Capital*, that will be published in 2008. This provides detailed recommendations on the construction of prices and quantities of capital services

In Chapter 20 of the revised 1993 SNA, estimates of capital services are described as follows: "By associating these estimates with the standard breakdown of value added, the contribution of labour and capital to production can be portrayed in a form ready for use in the analysis of productivity in a way entirely consistent with the accounts of the System." The measures of capital and labor inputs in the new architecture for the U.S. national accounts are consistent with the revised SNA and the OECD Manual, *Measuring Capital*. The volume measure of input is a quantity index of capital and labor services, while the volume measure of output is a quantity index of investment and consumption goods. Productivity is the ratio of output to input.

The new architecture has been endorsed by the Advisory Committee on Measuring Innovation in the 21st Century Economy to the U.S. Secretary of Commerce, Carlos Guttierez.[20] The first recommendation of the Advisory Committee is:

> Develop annual, industry-level measures of total factor productivity by restructuring the NIPAs to create a more complete and consistent set of accounts

[20] The Advisory Committee on Measuring Innovation in the 21st Century Economy (2008). The Advisory Committee was established on December 6, 2007, with ten members from the business community, including Carl Schramm, President and CEO of the Kauffman Foundation and chair of the Committee, Sam Palmisano, Chairman and CEO of IBM, and Steve Ballmer, President of Microsoft. The Committee also had five academic members, including Jorgenson. The Advisory Committee met on February 22 and September 12, 2007, to discuss its recommendations. The final report was released on January 18, 2008.

integrated with data from other statistical agencies to allow for the consistent estimation of the contribution of innovation to economic growth.[21]

The Advisory Committee endorses the new architecture in the following words:

The proposed new 'architecture' for the NIPAs would consist of a set of income statements, balance sheets, flow of funds statements, and productivity estimates for the entire economy and by sector that are more accurate and internally consistent. The new architecture will make the NIPAs much more relevant to today's technology-driven and globalizing economy and will facilitate the publication of much more detailed and reliable estimates of innovation's contribution to productivity growth.[22]

In response to the Advisory Committee's recommendations, BEA and BLS will produce a first set of estimates integrating multifactor productivity with the NIPAs in 2008. The results will be reported at a special session on economic statistics at the Annual Meeting of the American Economic Association in San Francisco on January 3-5, 2009.

The production account for the prototype system of accounts presented below is based on the gross domestic product (GDP) and gross domestic income (GDI) in current and constant prices. This production account has been disaggregated to the level of 85 industries, covering the period 1960-2005 by Jorgenson, Mun Ho, Jon Samuels, and Kevin Stiroh (2007), Industry Origins of the American Productivity Resurgence. The methodology follows that of Jorgenson, Ho and Stiroh (2005), Information Technology and the American Growth Resurgence. This methodology conforms to the international standards established the OECD *Productivity Manual* (2001).[23] The EU KLEMS project has recently developed systems of production accounts based on this methodology for the economies of all European Union (EU) member states.[24] For major EU countries this project includes accounts for 72 industries, covering the period 1970-2005.

The next step in integrating the NIPAs with the Flow of Funds Accounts will be to extend the national balance sheet for the U.S. economy generated by Jorgenson and Landefeld to incorporate balance sheets for the individual sectors identified in the Flow of Funds Accounts. The Integrated Macroeconomic Accounts for the U.S. produced by Teplin, *et al.*, have focused on the income and expenditures accounts, rather than balance sheets and the wealth accounts. A comprehensive wealth account for the U.S. economy is currently unavailable. Such an account is essential for measuring the accumulation of wealth to meet future financial needs for both public and private sectors, as well as assessing the levels of domestic and national saving and their composition.

---

[21] The Advisory Committee on Measuring Innovation in the 21st Century Economy (2008, p. 7).
[22] The Advisory Committee on Measuring Innovation in the 21st Century Economy. (2008, p. 8).
[23] See Schreyer (2001).
[24] The EU KLEMS project was completed on June 30, 2008. For further details see: www.**euklems**.net/. A summary of the findings is presented by Ark, O'Mahoney, and Timmer (2008).

As an example, investment in housing involves important long-term policy issues, such as the impact of federally subsidized mortgages, the effect of tax incentives for housing through income tax deductions for mortgage interest and state and local property taxes, and the role of investment in public housing. Balance sheets for the household sector will require the integration of rental values for housing, the asset value of the housing stock, and level of investment in residential structures. The value of the housing stock includes the value of residential structures, as well as the value of residential land. The value of land is included in the national wealth, but not in BEA's accounts for reproducible assets. This is a critical gap in the measurement of U.S. national wealth.

Another omission from the existing U.S. balance sheets is a comprehensive system of accounts for pension wealth. The international accounting community has achieved consensus on the desirability of accrual-based accounting for pensions. Under this approach pension assets are credited to individuals as they are accrued, while pension liabilities by public agencies such as the Social Security Administration (SSA) and private financial and non-financial firms are accrued on the same basis. Estimates of the liabilities of the SSA have been prepared on an accrual basis, but are not part of the U.S. system of national accounts.[25] The next step will be to compile similar accounts for other government pension funds and for private components of pension wealth.

An important issue, discussed at length by Barbara Fraumeni and Sumiye Okubo (2001) and Brent Moulton (2004), is the appropriate treatment of consumer durables. Moulton (2004) endorses BEA's current practice of including this investment in the tangible assets accounts, but excluding the services of these durables from the GDP. Starting from the premise that the boundaries of production, income and expenditures, accumulation, and wealth accounts should be the same, the prototype system of accounts constructed by Jorgenson and Landefeld treats the services of consumers' durables as an output as well as an input in the production account. These services are also a source of income and a form of expenditure in the income and expenditures account.

The proposed treatment of consumer durables has the advantage of accounting for owned and rented assets in the same way, following BEA's treatment of owner-occupied and renter-occupied housing. The principal disadvantage is that the scope of the GDP and the corresponding measure of GDI must be increased. The argument for this change is that BEA already compiles detailed accounts for investment and stocks of consumer durables as part of its accounts for reproducible assets. The only additional step required to make the accounts for housing and consumer durables fully consistent is to introduce imputed rental prices for consumer durables based on asset prices, like those employed in the BLS productivity accounts.

Similar, but distinct, issues arise for intangible forms of investment such as software and research and development. Jorgenson and Landefeld follow the 1993 SNA and the NIPAs in treating software as a form of investment, but extend this treatment by imputing a flow of services from stocks of software in household, government, and

[25] Accrual-basis accounts for the Social Security System are included in Financial Management Services (2007), *Annual Financial Report of the U.S. Government.*

business sectors. This requires an extension of the scope of the GDP and the GDI for the output and input of capital services in the household and government sectors. While research and development could be treated in the same way, we follow Fraumeni and Okubo (2005) and Moulton (2004) in recommending that this be treated as part of a satellite accounting system until more satisfactory data are available on the prices of assets generated by research and development activities.

The first step in implementing the prototype accounting system in Section 2 is to develop accounts in current prices for production, income and expenditures, accumulation, and wealth accounts for the U.S. economy for 1948–2006. Section 3 introduces accounts in constant prices with a description of index numbers for prices and quantities. The accounts in constant prices begin with production. The product side includes consumption and investment goods output in constant prices. The income side includes labor and capital inputs in constant prices. The ratio of real product to real input is multifactor productivity. Section 4 gives income and expenditures, accumulation, and wealth accounts in constant prices for the U.S. domestic economy and the ROW. Section 5 illustrates the application of the new architecture for the U.S. national accounts by considering the sources and uses of U.S. economic growth. Section 6 concludes.

2. Prototype Accounting System.

This section lays out a prototype system of U.S. national accounts that builds directly on the NIPAs. The measurement of income and wealth requires a system of seven accounts. This system must be carefully distinguished for the new system of seven accounts employed in presenting the NIPAs. The Domestic Income and Product Account provides data on the outputs of the U.S. economy, as well as inputs of capital and labor services. Incomes and expenditures are divided between two accounts – the Income and Expenditures Account and the Foreign Transactions Current Account. Capital accumulation is recorded in two accounts – the Domestic Capital Account and the Foreign Transactions Capital Account. Finally, assets and liabilities are given in the Wealth Account and the U.S. International Position.

A schematic representation of the prototype accounting system for the new architecture is given in figure 1.The complete accounting system includes a production account, incorporating data on output and input, an income and expenditures account, giving data on income, expenditures, and saving, and an accumulation account, allocating saving to various types of capital formation. A national balance sheet contains data on national wealth. The production, income and expenditures, and accumulation accounts are linked through markets for commodities and factor services. Finally, the accumulation accounts are related to the wealth accounts through the accounting identity between period-to-period changes in wealth and the sum of net saving and the revaluation of assets.

The structure of the prototype system is similar to the NIPAs. The NIPAs present current price measures for outputs and inputs, but constant price measures only for outputs. The key innovation in the BLS accounts for multifactor productivity is to present

both outputs and inputs in current and constant prices. Constant price measures of inputs and multifactor productivity are essential in accounting for the sources of economic growth. The prototype system provides current and constant price measures of income and expenditures in order to account for the generation of income and its disposition as uses of economic growth. Finally, the system presents current and constant price measures of saving and capital formation to provide the necessary link between current economic activity and the accumulation of wealth.

The Domestic Income and Product Account features gross domestic product (GDP) and gross domestic income (GDI), following the NIPAs. Both GDP and GDI are presented in current and constant prices. The fundamental accounting identity is that GDP is equal to GDI in current prices. Multifactor productivity, a summary measure of economic performance, is defined as the ratio of GDP to GDI in constant prices. The interpretation of output, input, and productivity requires the concept of a production possibility frontier.[26] In each period the inputs of capital and labor services are transformed into outputs of consumption and investment goods. This transformation depends on the level of productivity.

The Domestic Income and Product Account for the U.S. economy includes business, household and government sectors.[27] Imputations for the services of consumer durables and durables used by nonprofit institutions, as well as the net rent on government durables and government and institutional real estate, are introduced in order to achieve consistency between investment goods production and property compensation. The services of these assets are included in the output of services, together with the services of owner-occupied dwellings; both appear in property compensation. This assures that the accounting identity between the value of output and the value of input is preserved.

Gross domestic product in the NIPAs is divided among non-durable goods, durable goods, and structures, as well as services. The output of durables includes consumer durables and producer durables used by governments and nonprofit institutions, as well as producer durables employed by private businesses. The output of structures includes government structures, private business structures, institutional structures, and new residential housing. The purpose of the imputations for the property compensation of governments, households, and nonprofit institutions is to provide a consistent treatment of investment goods output and property compensation throughout the system.

In the NIPAs the rental value of owner-occupied residential real estate, including structures and land, is imputed from market rental prices of renter-occupied residential real estate. The value of these services is allocated among net rent, interest, taxes, and consumption of fixed capital. A similar imputation is made for the services of real estate

[26] This interpretation is developed by Jorgenson (1966), Jorgenson and Stiroh (2000), and Jorgenson (2001).

[27] Our estimates are based on those of Jorgenson (2001), updated through 2006 to incorporate data from the 2003 benchmark revision of the U.S. national accounts.

used by nonprofit institutions, but the imputed value excludes net rent. Finally, depreciation on government capital is included, while net rent on this capital is excluded. No property compensation for the services of consumer durables or producer durables used by nonprofit institutions is included. By imputing the value of these services and the net rent of government capital and real estate used by nonprofit institutions, the treatment of property compensation for these assets is aligned with that for assets used by private businesses.

Taxes charged against revenue, such as excise or sales taxes, must be carefully distinguished from taxes that are part of the outlay on capital services, such as property taxes. Output taxes are excluded from the value of output, reflecting prices from the producers' point of view. However, taxes on input are included, since these taxes are included in the outlay of producers. Taxes on output reduce the proceeds of the sector, while subsidies increase these proceeds; accordingly, the value of output includes production subsidies. To be more specific, excise and sales taxes, business non-tax payments, and customs duties are excluded from the value of output and indirect business taxes plus subsidies are included. This valuation of output corresponds to the value of output at "basic prices" in the 1993 SNA. The Domestic Income and Product Account for 2006 is presented in table 1.

Gross domestic income includes income originating in private enterprises and private households and institutions, as well as income originating in government. The imputed rental value of consumer durables, producer durables utilized by institutions, and the net rent on government durables and real estate and institutional real estate are added, together with indirect taxes included in the value of these inputs. The value of capital inputs also includes consumption of fixed capital and the statistical discrepancy; consumption of fixed capital is a component of the rental value of capital services. The value of gross domestic income for 2006 is presented in table 1.

Product and income accounts are linked through capital formation and property compensation. To make this link explicit gross domestic product is divided between consumption and investment goods and gross domestic income between labor and property compensation. Investment goods production is equal to the total output of durable goods and structures. Consumption goods production is equal to the output of non-durable goods and services from the NIPAs, together with the imputations for the services of consumer and institutional durables and the net rent on government durables and real estate, as well as institutional real estate.

Property income includes the statistical discrepancy and taxes included in property compensation, such as motor vehicle licenses, property taxes, and other taxes. The imputed value of the services of government, consumer and institutional durables, and the net rent on government and institutional real estate are also included. Labor income includes the compensation of employees of private enterprises, households and nonprofit institutions, as well as government. The value of labor input also includes the labor compensation of the self-employed. This compensation is estimated from the

incomes received by comparable categories of employees.[28] Gross domestic product, divided between investment and consumption goods output, and gross domestic income, divided between labor and property income, are given for 1948-2006 in table 2.

The most important difference between the prototype system and the NIPAs is the creation of a consolidated Income and Expenditures Account. By consolidating the income and expenditures accounts for household, business, and government sectors presented in the NIPAs, a single account presenting income and its disposition is given in the prototype system. This has the advantage of radically simplifying the accounts by excluding all transactions among the sectors. For example, the taxes paid by private business are expenditures by the business sector and sources of income to the government sector. In the consolidated Income and Expenditures Account, these tax payments cancel out.

For the Income and Expenditures Account the fundamental accounting identity is that income is equal to expenditures in current prices. Income includes labor and property income from the Domestic Income and Product Account, evaluated at market prices, income received from the ROW, net of income payments to the ROW, and net current taxes and transfers to the ROW. Expenditures include personal consumption expenditures, government consumption expenditures, and saving, net of depreciation. Income and expenditures are presented in current and constant prices in order to account for the generation of income and its disposition through expenditures and saving and uses of economic growth. The interpretation of these magnitudes in constant prices requires the notion of a social welfare function, following Paul Samuelson, William Nordhaus and James Tobin, and Martin Weitzman.[29] Consumption expenditures in constant prices represent the current flow of goods and services for consumption, while net saving in constant prices corresponds to increments in the current period of future flows of consumption.

Net income is defined as proceeds from the sale of factor services from the Domestic Income and Product Account, plus income receipts from the ROW, less income payments, and net current taxes and transfers to the ROW, less depreciation. Net expenditures are defined as personal and government consumption expenditures from the Domestic Income and Product Account, evaluated at market prices, plus net saving. These expenditures exclude purchases of durable goods, but include the services of accumulated stocks of these durables. The value of net income for the year 2006 is presented in table 3.

Consumption expenditures include personal and government expenditures on services and non-durable goods, together with the imputation for the services of consumer, institutional, and government durables and the net rent of institutional and government real estate. Purchases of consumer durables, included in personal consumption expenditures in the NIPAs, are excluded from expenditures and included in investment in the Domestic Capital Account described below. The value of personal and

[28] Details are provided by Jorgenson, Ho, and Stiroh (2005, pp. 201-290).
[29] See Samuelson (1961), Nordhaus and Tobin (1973) and Weitzman (2003).

government consumption includes taxes and excludes subsidies on output, reflecting prices from the purchasers' point of view. The value of net expenditures for the year 2006 is presented in table 3.

Income and expenditures accounts are linked through saving and the resulting property income. To make this link explicit, net income is divided between labor and property income, net of depreciation, and net expenditures between net saving and consumption. Net income and expenditures in current prices for 1948-2006 are given in table 4. Income is divided between labor and property income, net of depreciation, while expenditures are divided between personal and government consumption and net saving.

The Foreign Transactions Current Account in the NIPAs gives receipts from exports and income receipts from the ROW. This is balanced against outlays for imports, income payments, current taxes and transfers to the ROW, and the balance on current account. Receipts, outlays, and the balance on current account are presented for the year 2006 in table 5. These data are given in current prices for 1948-2006 in table 6.

The Domestic Capital Account allocates saving to various forms of investment. The fundamental accounting identity is that saving is equal to investment in current prices. Saving and investment in constant prices are taken to be identical as well. Investment in constant prices is an essential link between current economic activity and the accumulation of stocks of capital. As in the Income and Expenditures Account, the Domestic Capital Account is radically simplified by consolidating the capital accounts for household, business, and government sectors. Claims among the sectors cancel out, so that only investment in tangible assets and changes in the U.S International Position are presented.

The NIPAs include a Domestic Capital Account that presents investment and saving. This account is implemented by consolidating the accounts of business and government sectors with those of households and institutions. Financial claims on the business sector by households and institutions are liabilities of the business sector; in the consolidated accounts these assets and liabilities cancel out. Similarly, financial claims on the government sector by households and institutions cancel out.

Investment includes gross private domestic investment, government investment, and expenditures on durable goods by households and institutions, all evaluated at market prices, and the balance on current accounts. Net saving includes gross saving, as defined in the NIPAs, less consumption of fixed capital for households, institutions, and governments. Domestic saving and investment are given for 2006 in table 7, together with the revaluation of fixed assets and the change in wealth. Domestic investment is presented in current prices for 1948-2006 in table 8. Gross saving, depreciation, net saving, revaluation of assets, and the change in wealth are given in table 9.

The estimates of revaluations for net claims on foreigners are based on accounts at market prices included in the U.S. International Position. Revaluations are estimated as the difference between the period-to-period changes in these stocks and the deficit of the

rest of world sector. The NIPAs include a Foreign Transactions Capital Account that links net claims on foreigners to the balance on current account from the NIPAs. Data from the Foreign Transactions Account are given for 2006 in table 10 and for the period 1948-2006 in table 11.

The Wealth Account completes the domestic side of the prototype system of U.S. national accounts. The Wealth Account is consistent with the balance sheets for financial sectors presented by Teplin, *et al.* (2006). These balance sheets also include all tangible wealth of business, government, and household sectors, as well as the U.S. International Position. The principal difference between the prototype system of accounts for capital and wealth and the 1993 SNA is that the SNA's capital and revaluation accounts are combined into a single accumulation account. This account also includes period-to-period changes in wealth. The treatment of consumer durables also differs from the 1993 SNA.[30]

All of the accounts considered up to this point contain data on flows. The wealth accounts contain data on stocks. These accounts are presented in balance sheet form with the value of assets equal to the value of liabilities as an accounting identity. The Wealth Account includes the tangible assets of household, business, and government sectors and net claims on the ROW. The U.S. International Investment Position includes foreign holdings of U.S. domestic assets and U.S. holdings of foreign assets. The Wealth Account for 2006 is presented in table 12, while the U.S. International Position for 2006 is given in table 14. Annual data on domestic wealth for the period 1948-2006 are presented in table 13, while the U.S. International Investment Position for this period is given in table 15.

Although it will eventually be desirable to provide a breakdown of the prototype system of U.S. national accounts by industrial sectors, the prototype system constructed by Jorgenson and Landefeld is limited to aggregates for the U.S. economy as a whole. Disaggregating the production account by industrial sector will require a fully integrated system of input-output accounts and accounts for gross product originating by industry, as described by Ann Lawson, *et al.* (2006), and Brian Moyer, *et al.* (2006). This can be combined with the measures of capital, labor, and intermediate inputs by industry presented by Jorgenson, *et al.* (2005), to generate production accounts by sector.[31] The principles for constructing these production accounts are discussed by Fraumeni, *et al.* (2006).

The Foreign Transactions Current and Capital Accounts are identical to the NIPAs. Similarly, the U.S. International Position from the NIPAs is incorporated without modification. The income and expenditures, capital, and wealth accounts in the prototype system are limited to national aggregates. This has the advantage that transactions among

[30] United Nations (1993, p. 208).

[31] A system of production accounts for industrial sectors of the U.S. economy is given by Jorgenson, Gollop, and Fraumeni (1987). This incorporates a consistent time series of input-output tables and provides the basis for the industry-level production accounts presented in Schreyer (2001). The system of production accounts of Jorgenson, Gollop, and Fraumeni has been updated and revised to incorporate information on information technology producing sectors by Jorgenson, Ho, and Stiroh (2005). Chapter 4, pp. 87-146, provides details on the construction of the time series of input-output tables.

domestic sectors are not required in accounting for income and expenditures and claims among domestic sectors are not required in accounting for capital formation and wealth. The basic similarities between this approach and current accounting practice can be recognized through the reliance on data from the NIPAs.

3. Production Account.

To express any accounting magnitude in constant prices the value in current prices must be separated between components associated with prices and quantities. Estimates in constant prices are associated with a quantity index, while the price index is an implicit deflator. As an illustration, GDP in current prices in the Domestic Income and Product Account is the product of GDP in constant prices and the implicit price deflator for GDP. Similarly, GDI in current prices is the product of GDI in constant prices and the implicit deflator for GDI.

As a second illustration, income in current prices from the Income and Expenditures Account can be separated between income in constant prices and the implicit deflator for income. Similarly, the value of expenditures can be separated into price and quantity components. Market prices that include production and sales taxes are used in evaluating private and government consumption expenditures, reflecting the purchasers' perspective. The price and quantity decomposition is extended to saving and investment in order to link investment in constant prices to the change in wealth.

The principal innovation in presenting the Domestic Income and Product Account in constant prices is to introduce a user cost formula for imputing the rental price of capital services from market prices for the underlying assets. Systems of national accounts have traditionally relied on market rental prices for making these imputations, but data on market rentals are too limited in scope to cover the capital services required for an integrated and consistent system of U.S. national accounts. In this section the Domestic Income and Product Account is presented in constant prices.

3.1. Index Numbers.

To illustrate the construction of price and quantity index numbers for output in the Domestic Income and Product Account, suppose that *m* components of output are distinguished in the accounts; the value of output, say qY, can be written:

$$qY = q_1Y_1 + q_2Y_2 + \cdots + q_mY_m.$$

The system of index numbers consists of a price index for output q and a quantity index for output Y, defined in terms of the prices (q_i) and quantities (Y_i) of the m components. The base for all price indexes in the prototype system of U.S. national accounts is 1.000 in 2000, following the December 2003 benchmark revision of the NIPAs. The base for the quantity indexes is the corresponding value in 2000.

The GDP is presented in current and constant prices in the NIPAs. The index number system is based on the Fisher ideal index, a geometric average of Laspeyres and Paasche index numbers.[32] The Laspeyres index of quantity of output, say Y^L, is defined by:

$$Y_1^L = \frac{\sum q_{i0} Y_{i1}}{\sum q_{i0} Y_{i0}}.$$

The Paasche index uses current prices, rather than base period prices as weights:

$$Y_1^P = \frac{\sum q_{i1} Y_{i1}}{\sum q_{i1} Y_{i0}}.$$

The corresponding price index is obtained by dividing GDP in current prices by the Fisher ideal quantity index.

Landefeld and Robert Parker (1997) provide a detailed exposition of the chained Fisher ideal price and quantity indexes employed in the NIPAs. Erwin Diewert (1976) has defined a superlative index number as an index that exactly replicates a flexible representation of the underlying technology (or preferences). A flexible representation provides a second-order approximation to an arbitrary technology (or preference system). A.A. Konus and S. S. Byushgens (1926) first showed that the Fisher ideal index employed in the NIPAs is superlative in this sense. Laspeyres and Paasche indexes are not superlative and fail to capture substitutions among products in response to price changes.

The BLS multifactor productivity program employs a superlative quantity index for measuring real input that replicates a translog representation of technology:

$$\log Y_t - \log Y_{t-1} = \sum \overline{w}_{it} (\log Y_{it} - \log Y_{i,t-1}).$$

The relative share of the *i*-th output in the value of total output, say w_i, as:

$$w_i = \frac{q_i Y_i}{\sum q_i Y_i}.$$

The weights $(\overline{w}_{it})$ are arithmetic averages of the relative shares in the two periods,

$$\overline{w}_{it} = \frac{1}{2} w_{it} + \frac{1}{2} w_{i,t-1}.$$

[32] Ideal index numbers were introduced by Fisher (1922).

The corresponding price index is obtained by dividing the value of output by the translog quantity index.[33]

In the 1993 SNA superlative systems of index numbers like those employed in the U.S. national accounts are recommended for the output side of the production account and for labor input. As the base period is changed from time to time, chain-linking of the resulting price and quantity indexes is recommended. The index numbers in the prototype system of U.S. national accounts are chain-linked Fisher ideal indexes of components from the NIPAs.

At a number of points data net and gross of taxes are required, reflecting differences between sellers and buyers that result from tax wedges. As one illustration, consumer expenditures on goods and services in the Income and Expenditures Account include sales and excise taxes, reflecting the purchasers' point of view. Sales of the same goods and services in the Domestic Income and Product Account exclude these taxes, reflecting the perspective of producers. The prices net of taxes are denoted "basic prices" in the 1993 SNA. Sales and excise taxes are treated as part of the price paid by consumers, so that the value of transactions can be separated into three components—price, quantity, and tax rate.

To illustrate the construction of price, quantity, and tax indexes, consider the value of consumer expenditure as it enters the Income and Expenditures Account. Suppose that *m* components of consumer expenditure are distinguished in the account; the value of output, gross of tax, say q^+Y, may be written:

$$q^+Y = q_1^+Y_1 + q_2^+Y_2 + \cdots + q_m^+Y_m.$$

The prices (q_i^+) include sales and excise taxes; the quantities (Y_i) are measured in the same way as in the Domestic Income and Product Account. Price and quantity indexes based on these prices and quantities are defined as before.

To introduce taxes into the system of index numbers, let the market price of output q^+ be equal to the price received by the producer, say q, multiplied by unity plus the effective tax rate, t; the value of output at market prices is:

$$(1+t)qY = \sum(1+t_i)q_iY_i$$

where the prices paid by the consumers (q_i^+) are expressed in terms of prices received by producers (q_i) and tax rates (t_i). Accordingly, an index of taxes $1+t$ is constructed by dividing the value of transactions at purchasers' prices by the value of transactions at producers' prices. The price and quantity indexes at market prices differ from the corresponding indexes at producer prices since taxes enter the weights (w_i) employed in constructing the indexes.

[33] Translog index numbers were discussed by Fisher (1922) .

3.2. Output and Labor Input.

To construct a quantity index for GDP, first allocate the value of output between consumption and investment goods. Investment goods include durable goods and structures. Consumption goods include non-durable goods and services. Data for prices and quantities of consumption and investment goods are presented in the NIPAs. Price and quantity index numbers for the services of consumer, institutional and government durables, as well as institutional and government real estate, are part of the imputation for the value of the capital services.

The value of output from the point of view of the producing sector excludes sales and excise taxes and includes subsidies. These taxes and subsidies are allocated in proportion to the consumption and investment goods output in current prices. The price index for each type of output is implicit in the value and quantity of output included in the GDP. Price and quantity indexes of GDP are constructed by applying chained Fisher ideal index numbers to price and quantity data for consumption and investment goods product. The results are given in table 16.

Construction of a quantity index of labor income begins with data on hours worked and labor compensation per hour. Hours worked and labor compensation by sex, age, educational attainment, and employment class are obtained from the Census of Population and the Current Population Survey. These data are based on household surveys. Control totals for hours worked and labor compensation are taken from the NIPAs. These totals are based on establishment surveys and reflect payroll records.[34]

Denoting the labor income quantity index by L and the corresponding price index by p_L, the value of labor input is the sum over all categories of labor input:

$$p_L L = \sum p_{L,j} L_j,$$

where $p_{L,j}$ is the price of the j-th type of labor input and L_j is the number of hours worked by workers of this type. Price and quantity indexes of labor income are constructed from chained Fisher ideal quantity indexes, as recommended in the 1993 SNA.

Price and quantity indexes of labor income for1948-2006 are given in table 17, along with employment, weekly hours, hourly compensation, and hours worked. Labor quality in table 17 is defined as the ratio of the quantity index of labor income to hours worked. Labor quality captures changes in the composition of the work force by the characteristics of individual workers, as suggested by BLS (1993). A more detailed description of the sources and methods for these estimates is provided by Jorgenson, Ho and Stiroh (2005).

[34] Details are given by Jorgenson, Ho, and Stiroh (2005, pp. 201-290).

3.3 Capital Input

Estimates of capital income, property compensation, depreciation, and capital assets in constant prices require data on prices and quantities of capital goods.[35] The starting point for a quantity index of capital income is a perpetual inventory of capital stocks. Under the assumption that efficiency of capital assets declines geometrically with age, the rate of depreciation, say δ, is a constant. Capital stock at the end of every period can be estimated from investment and capital stock at the beginning of the period:

$$K_t = A_t + (1-\delta)K_{t-1},$$

where K_t is end-of-period capital stock, A_t the quantity of investment and K_{t-1} the capital stock at the beginning of the period. To transform capital stocks into flows of capital services, an assumption about the time required for new investment to begin to contribute to production must be introduced, namely, that the capital service from each asset is proportional to the arithmetic average of current and lagged capital stocks[36].

The perpetual inventory estimates of capital stocks are based on BEA's fixed assets accounts (2003). These data include investment by asset class for 61 types of non-residential assets from 1901-2006, 48 types of residential assets for the same period, and 13 types of consumers' durables from 1925-1999. As described by Fraumeni (1997), the reproducible wealth accounts use efficiency functions for most assets that decline geometrically with age. To simplify the accounts for tangible wealth, the age-efficiency profiles that are not geometric are approximated by Best Geometric Average (BGA) profiles that are geometric, following Charles Hulten and Frank Wykoff (1982).[37] Benchmark estimates of capital stocks in 2006, expressed in constant prices of 2000, rates of depreciation, and the sources of price indexes for each type of capital are presented in table 18.

The price indexes for reproducible assets are taken from the NIPAs. An important assumption is that these prices are measured in "efficiency" units, holding the performance of assets constant over time. For example, the performance of computers and peripheral equipment is held constant, using the price indexes constructed by a BEA-IBM team and introduced into the NIPAs in 1985. Ellen Dulberger (1989) presents a detailed report on her research on the prices of computer processors for the BEA-IBM project. Speed of processing and main memory played central roles in her model. Jack Triplett (1989, 2005) has provided exhaustive surveys of research on hedonic price indexes for computers. The official price indexes for computers provide the paradigm for economic measurement and capture the steady decline in IT prices. The official price indexes for central office switching equipment and prepackaged software also hold performance constant.

---

[35] Further details are given by Jorgenson, Ho, and Stiroh (2005, pp. 147-200).

[36] This assumption is employed by Jorgenson and Stiroh (2000), Jorgenson (2001), Jorgenson, Ho, and Stiroh (2005) and Oliner and Sichel (2000). Jorgenson, Gollop and Fraumeni (1987) had assumed that capital services were proportional to lagged capital stocks.

[37] BEA efficiency profiles are discussed in Bureau of Economic Analysis (2008).

Telecommunications technology is crucial for the rapid development and diffusion of the Internet, the most striking manifestation of information technology in the American economy. Kenneth Flamm (1989) was the first to compare the behavior of computer prices and the prices of communications equipment. He concluded that the communications equipment prices fell only a little more slowly than computer prices. Robert Gordon (1990) compared Flamm's results with the official price indexes, revealing substantial bias in the official indexes. Unfortunately, constant quality price indexes cover only a portion of communications equipment. Switching and terminal equipment rely heavily on semiconductor technology, so that product development reflects improvements in semiconductors. Bruce Grimm's (1997) constant quality price index for digital telephone switching equipment was incorporated into the national accounts in 1996. The output of communications equipment in the NIPA also incorporates a constant quality price index for cellular phones.

Much communications investment takes the form of the transmission gear, connecting data, voice, and video terminals to switching equipment. Technologies such as fiber optics, microwave broadcasting, and communications satellites have progressed at rates that outrun even the dramatic pace of semiconductor development. Mark Doms (2005) has provided comprehensive price indexes for terminals, switching gear, and transmission equipment. These have been incorporated into the Federal Reserve's Index of Industrial Production, as described by Carol Corrado (2003), but are not yet included in the NIPAs.[38]

Both software and hardware are essential for information technology and this is reflected in the large volume of software expenditures. The eleventh comprehensive revision of the national accounts, released by BEA on October 27, 1999, re-classified computer software as investment[39]. Before this important advance, business expenditures on software were treated as current outlays, while personal and government expenditures were treated as purchases of non-durable goods. Software investment is growing rapidly and is now much more important than investment in computer hardware.

Parker and Grimm (2000) describe the estimates of investment in software. BEA distinguishes among three types of software -- prepackaged, custom, and own-account software. Prepackaged software is sold or licensed in standardized form and is delivered in packages or electronic files downloaded from the Internet. Custom software is tailored to the specific application of the user and is delivered along with analysis, design, and programming services required for customization. Own-account software consists of software created for a specific application. However, only price indexes for prepackaged software hold performance constant.

Parker and Grimm (2000) present a constant quality price index for prepackaged software. This combines a hedonic model of prices for business applications software and a matched model index for spreadsheet and word processing programs developed by

[38] A survey of hedonic methods in the NIPAs is given by Wasshausen and Moulton (2006). Triplett (2004) discusses the construction and application of hedonic price indexes.
[39] Moulton (2000) describes the 11th comprehensive revision of NIPA and the 1999 update.

Stephen Oliner and Daniel Sichel (1994). Prepackaged software prices decline at more than ten percent per year over the period 1962-1998. Since 1998 the BEA has relied on a matched model price index for all prepackaged software from the Producers Price Index (PPI) program of the Bureau of Labor Statistics. BEA's prices for own-account and custom software incorporate data on programmer wage rates. Custom and own-account software prices are a weighted average of prepackaged software prices and programmer wage rates with arbitrary weights of 75 percent for programmer wage rates and 25 percent for prepackaged software.

Given market rental prices by class of asset, the implicit rental values paid by owners for the use of their property can be imputed by applying these rental rates. This method of imputation is used to estimate the rental value of owner-occupied dwellings in the U.S. national accounts. The total rental value is divided among taxes, consumption of fixed capital, interest payments, and net rent. A similar method of imputation is used for the space rental value of institutional buildings, but net rent is omitted from the imputation. The main obstacle to broader application of this method is the lack of data on market rental prices. A substantial proportion of the capital goods employed in the U.S. economy has an active rental market; most classes of structures can be rented and a rental market exists for many types of equipment, especially aircraft, trucks, construction equipment, computers, and so on. Unfortunately, very little effort has been devoted to compiling data on rental rates for either structures or equipment.

The perpetual inventory method can be extended to rental prices of capital services in order to provide an alternative approach for imputation of the rental values.[40] For each type of capital perpetual inventory estimates are prepared for asset prices, service prices, depreciation, and revaluation. Under the assumption of geometrically declining relative efficiency of capital goods, the asset prices decline geometrically with vintage. The formula for the value of capital stock,

$$q_{A,t}K_t = \sum q_{A,t}(1-\delta)^{\tau} A_{t-\tau},$$

is the sum of past investments weighted by relative efficiencies and evaluated at the price for acquisition of new capital goods $q_{A,t}$. Second, depreciation $q_{D,t}$ is proportional to the value of beginning of period capital stock:

$$q_{D,t}K_{t-1} = \delta q_{A,t}K_{t-1}.$$

Finally, revaluation $\left(q_{A,t} - q_{A,t-1}\right)K_{t-1}$ is equal to the change in the acquisition price of new capital goods multiplied by beginning of period capital stock.

Households and institutions and government are not subject to direct taxes. Non-corporate business is subject to personal income taxes, while corporate business is subject

[40] Christensen and Jorgenson (1973) present a prototype accounting system for the private sector of the U.S. economy with prices and quantities of capital services for all assets. They also present a detailed extension of the perpetual inventory method to rental prices for these assets.

to both corporate and personal income taxes. Businesses and households are subject to indirect taxes on the value of property. In order to take these differences in taxation into account each class of assets is allocated among the five sectors of the U.S. domestic economy — corporations, non-corporate business, households and institutions and government. The relative proportions of capital stock by asset class for each sector for 2006 are given in table 19.

For a sector not subject to either direct or indirect taxes, the capital service price $q_{K,t}$ is:

$$q_{K,t} = q_{A,t-1}[r_t - \pi_t + (1+\pi_t)\ \delta],$$

where r_t is the nominal rate of return and π_t is the rate of inflation in the acquisition price of new capital goods. This formula can be applied to government and nonprofit institutions by choosing an appropriate rate of return, as described below.[41]

Given the rate of return for government and nonprofit institutions, estimates can be constructed for capital service prices for each class of assets held by these sectors — land held by government and institutions, residential and nonresidential structures, producer and consumer durables. Price and quantity measures of capital input by class of asset can be combined into price and quantity index numbers of capital input by government and institutions, using the chained Fisher ideal index numbers employed in the NIPAs.

Households hold consumer durables and owner-occupied dwellings that are taxed indirectly through property taxes. To incorporate property taxes into the estimates of the price and quantity of capital services taxes are added to the cost of capital, depreciation, and revaluation, obtaining the capital service price:

$$q_{K,t} = q_{A,t-1}[r_t - \pi_t + (1+\pi_t)\ \delta + (1-t_e)\tau_t],$$

where τ_t is the rate of property taxation and t_e is the average marginal tax rate on income from which property taxes are deductible.

The household rate of return:

$$r_t - \pi = \beta[(1-t_e)i_t - \pi_t] + (1-\beta)[\rho_t - \pi_t],$$

is a weighted average of the rate of interest i_t and the nominal rate of return on equity in household assets ρ_t with weights that depend on the ratio of debt to the value of household capital stock β and the average marginal individual tax rate on income from

[41] Alternative methods for imputing the rate of return to capital are reviewed by Schreyer (2008). A detailed derivation of prices of capital services is given by Jorgenson and Kun-Young Yun (2001).

household property t_e. The nominal rate of return on equity is set equal to the corresponding rate of return for owner-occupied housing after all taxes.

Given the rate of return for households, estimates of capital service prices can be constructed for each class of assets held by households—land, residential structures, and consumer durables. Separate effective tax rates are employed for owner-occupied residential property, both land and structures, and for consumer durables. Price and quantity measures of capital income by class of asset are combined into price and quantity index numbers of capital income by households, using chained Fisher ideal index numbers.

The measure of the GDP differs from the NIPAs in the treatment of durables and real estate held by households and institutions and government. Personal and government consumption expenditures on durables are assigned to investment rather than consumption. This leaves GDP unchanged. The service flows from household, institutional, and government durables are added to the value of output and the value of capital input. The net rent component of the services of institutional and government real estate is added to values of both output and input.

The main challenge in the measurement of price and quantity of capital services for non-corporate business is to separate the income of unincorporated enterprises between labor and property compensation. Labor compensation of the self-employed is estimated from the incomes received by comparable categories of employees.[42] Property compensation as the sum of income originating in business, other than corporate business and government enterprises and the net rent of owner-occupied dwellings, less the imputed labor compensation of proprietors and unpaid family workers, plus non-corporate consumption of fixed capital, less allowances for owner-occupied dwellings and institutional structures, and plus indirect business taxes allocated to the non-corporate sector. The statistical discrepancy is allocated to non-corporate property compensation.

The personal income tax must be taken into account in order to obtain an estimate of the non-corporate rate of return. The capital service price, modified to incorporate income tax and indirect business taxes, becomes:

$$q_{K,t} = \left[\frac{1 - t_e z_t - k_t + y_t}{1 - t_e}\right] q_{A,t-1}[r_t - \pi_t + (1 + \pi_t)\ \delta] + q_{A,t-1}\tau_t,$$

where indirect business taxes $q_{A,t-1}\tau_t$ are deducted from non-corporate property compensation before taxes as an expense, t_e is the average marginal tax rate on non-corporate property compensation, z_t is the present value of depreciation allowances on one dollar's worth of investment, k_t the investment tax credit, and $y_t = k_t u_t z_t$. The variable y_t is set equal to zero for all years but 1962 and 1963; it is used in accounting for the fact

[42] Estimation of the labor compensation of the self-employed is discussed by Jorgenson, Ho, and Stiroh (2005).

that the investment tax credit was deducted from the value of an asset for depreciation in those years. The tax credit and depreciation allowances are different from zero only for durables and structures.

The non-corporate rate of return:

$$r_t - \pi = \beta[(1-t_e)i_t - \pi_t] + (1-\beta)[\rho_t - \pi_t(1-t_g)],$$

is a weighted average of the rate of interest i_t and the nominal rate of return on non-corporate assets ρ_t with weights that depend on the ratio of debt to the value of non-corporate capital stock β, the average marginal individual tax rate on income from non-corporate property t_e, and the marginal tax rate on capital gains on non-corporate assets t_g.

The sum over the value of capital services for all assets held by non-corporate business is solved for the rate of return. Given data on prices of acquisition, stocks, tax rates, and replacement rates, capital service prices can be estimated for each class of assets held by the non-corporate sector. Price and quantity measures of capital input by class of asset are combined into price and quantity index numbers of capital input, using chained Fisher ideal index numbers, as before.

Finally, corporate property compensation is the income originating in corporate business, less compensation of employees, plus corporate consumption of fixed capital, plus business transfer payments, plus the indirect business taxes allocated to the corporate sector. The corporate income tax must be taken into account to obtain an estimate of the corporate rate of return. The capital service price becomes:

$$q_{K,t} = \left[\frac{1-uz_t-k_t+y_t}{1-u}\right] q_{A,t-1}[r_t - \pi_t + (1+\pi_t)\ \delta] + q_{A,t-1}\tau_t,$$

where indirect business taxes $q_{A,t-1}\tau_t$ are deducted from corporate property compensation before taxes as an expense, u is the corporate tax rate, z_t is the present value of depreciation allowances, k_t the investment tax credit, and $y_t = k_t u_t z_t$.

The corporate rate of return:

$$r_t - \pi = \beta[(1-u)i_t - \pi_t] + (1-\beta)\left[\frac{\rho_t - \pi_t(1-t_g)}{(1-t_e)\alpha + (1-t_g)(1-\alpha)}\right],$$

is a weighted average of the rate of interest i_t and the nominal rate of return on corporate assets ρ_t with weights that depend on the ratio of debt to the value of corporate capital stock β, the average marginal individual tax rate on income from

corporate property t_e, the marginal tax rate on capital gains on corporate equities t_g, and the dividend payout ratio α from corporate income after corporate taxes.

The method for estimating the corporate rate of return is the same as for the non-corporate rate of return. Property compensation in the corporate sector is the sum of the value of services from residential and nonresidential structures, producer durable equipment, inventories, and land held by the sector. To estimate the rate of return in the corporate sector the variables that enter the value of capital services are required except, of course, for the rate of return. The rate of return is expressed in terms of these variables and total property compensation. Price and quantity indexes of capital input by class of asset are combined into price and quantity indexes of capital input for the corporate sector.

The nominal rate of return is assumed to be the same for all assets within a given sector. For the corporate and non-corporate sectors this rate of return is inferred from the value of property compensation, asset prices based on market transactions, stocks of capital goods, rates of replacement, and variables describing the tax structure. For households the rate of return is inferred from income from owner-occupied housing. For government, the imputed rate of return is set equal to the average of corporate, non-corporate, and household rates of return after both corporate and personal taxes. To obtain price and quantity indexes of capital income for the domestic sector chained Fisher ideal and quantity indexes are calculated for each of the five sub-sectors—corporations, non-corporate business, households, institutions, and government. Price and quantity indexes of capital income for corporations, non-corporate business, households, institutions, and government, as well as the U.S. domestic economy are given for 1948-2006 in table 20.

Price and quantity index numbers for GDI are constructed by combining indexes of labor and capital income. The weights for labor and capital are the relative shares of labor and capital income in GDI. Price and quantity indexes of GDI for the U.S. domestic economy are given for 1948-2006 in table 21. Multifactor productivity, also given in table 21, is defined as the ratio of GDP in constant prices to GDI in constant prices.[43] Growth in multifactor productivity can be interpreted as an increase in efficiency of the use of input to produce output or as a decline in the cost of input required to produce a given value of output.

4. Income and Expenditure, Capital, and Wealth Accounts.

The previous section gives the Domestic Income and Product Account for the U.S. economy in constant prices. This section presents Income and Expenditure, Capital, and Wealth Accounts in constant prices for the domestic economy. The accounts for the ROW are identical to those generated by BEA.

[43] This index of multifactor productivity conforms to the international standards presented in Schreyer (2001). For further discussion, see Jorgenson (2001).

4.1 Income and Expenditures.

To construct price and quantity indexes of household and government expenditures for the U.S. domestic economy, data are obtained for consumption expenditures on non-durable goods and services, excluding the services of institutional real estate, from the Domestic Income and Production Account. Consumption expenditures are evaluated at market prices and combined with imputed values of the services of household, institutional, and government durables and the services of institutional and government real estate.

The value of consumption expenditures at market prices includes customs duties, excise and sales taxes, and excludes subsidies. Price and quantity indexes of consumption expenditures are constructed from the price and quantity indexes of non-durables, services, and estimates of capital services by using chained Fisher ideal index numbers. Gross saving and net saving in constant prices are taken from the Domestic Capital Account described below. Price, quantity, and tax indexes for personal and government consumption expenditures are presented in table 22.

The starting point for estimating price and quantity components of Domestic Capital Income is the price and quantity of capital income in the Domestic Income and Product Account. The most important innovation is in the use of a rental price formula to impute the price of capital services. Price and quantity indexes of capital income are presented in table 23. Similarly, prices and quantities of the different categories of labor services are combined into price and quantity indexes of labor income using chained Fisher ideal index numbers. Price and quantity indexes of labor, capital, and gross income are presented in table 24.

The quantity index of net expenditures is a measure of social welfare. It combines current consumption with net increments to future consumption, as suggested by Weitzman (2003). Similarly, the quantity index of net income is a measure of the labor and property incomes generated by the U.S. economy. The ratio of expenditures to income in constant prices is the level of living, a quantity index of welfare generated from current and future consumption in proportion to the effort required in the form of labor and capital services. This must be carefully distinguished from multifactor productivity, the ratio of GDP to GDI, a measure of productive efficiency. Price and quantity indexes of net expenditures, net income and the level of living index are presented in table 25.[44]

4.2 Domestic Capital Account.

The fundamental accounting identity for the Domestic Capital Account is that gross saving from the Income and Expenditures Account is equal to investment. Investment and saving are also equal in constant prices. Investment is a chained Fisher ideal quantity index of private and government investment, evaluated at market prices.

---

[44] For further discussion, see Hulten (1992).

The quantities are taken from the Domestic Income and Product Account, while the prices include sales and excise taxes paid by purchasers of investment goods. Price, quantity, and tax indexes of gross investment are given for 1948-2006 in table 26.

Depreciation and the revaluation of assets in constant prices are required to complete the saving side of the Domestic Capital Account in constant prices. If the decline in efficiency of capital goods is geometric the change in wealth from period to period for a single capital good is written:

$$\begin{aligned} W_t - W_{t-1} &= q_{A,t}K_t - q_{A,t-1}K_{t-1} \\ &= q_{A,t}(K_t - K_{t-1}) + (q_{A,t} - q_{A,t-1})K_{t-1} \\ &= q_{A,t}A_t - q_{A,t}\delta K_{t-1} + (q_{A,t} - q_{A,t-1})K_{t-1}. \end{aligned}$$

Gross saving is represented by $q_{A,t}A_t$, which is equal to gross investment and has the same price and quantity components.

Depreciation is represented by $q_{A,t}\delta K_{t-1}$. The price and quantity indexes of depreciation are constructed from the lagged stocks, K_{t-1}, with depreciation prices $q_{D,t}$ as weights. Revaluation is represented by $(q_{At} - q_{A,t-1})K_{t-1}$. Price and quantity indexes of revaluation are constructed from lagged capital stocks with revaluation prices $(q_{A,t} - q_{A,t-1})$ as weights. Chained Fisher ideal price and quantity index numbers of private national saving, depreciation, and revaluation for the period 1948-2006 are presented in table 27.

4.3 Wealth Accounts.

Changes in the value of wealth from period to period can be separated into price and quantity components. Under the assumption of geometric decline in efficiency of capital goods net investment is the quantity component, while revaluation is the price component. Wealth is the product of the price index $q_{A,t}$ and quantity index K_t :

$$W_t = q_{A,t}K.$$

Asset prices and quantities of capital stocks are combined into price and quantity indexes for wealth, using chained Fisher index numbers.

The Wealth Account for the U.S. economy includes tangible assets held by businesses, households and institutions, and government and net claims on foreigners. Prices and quantities of assets are estimated for each of the five sectors by applying chained Fisher ideal index numbers to price and quantity data for all classes of assets held by the sector. Price and quantity indexes of private domestic tangible assets, government tangible assets, and wealth for 1948-2006 are given in table 28. These are obtained by applying Fisher ideal index numbers to price and quantity indexes for the five sectors.

5. The Sources and Uses of Economic Growth.

The prototype system of accounts provides a framework for the analysis of sources and uses of U.S. economic growth.[45] This framework consists of a production account, an income and expenditures account, and capital and wealth accounts. These can be linked to underlying industry, asset, and liability accounts. The framework can be used for both aggregated and disaggregated analysis of such issues as the contributions of capital and labor services and the growth of multifactor productivity to economic growth and the uses of growth for consumption, saving, and increases in the level of living.

The sources of post-war U.S. economic growth can be analyzed on the basis of measures of output, input, and multifactor productivity from the Domestic Income and Product Account presented in table 21. The uses of this economic growth can be explored in terms of estimates of income, expenditures, and the level of living from the Domestic Income and Expenditures Account given in table 25. Finally, patterns of investment, saving, and the accumulation of wealth can be examined through data from the Domestic Capital and Wealth Accounts in tables 26, 27, and 28.

The interpretation of outputs, inputs, and productivity requires the production possibility frontier introduced by Jorgenson (1966):

$$Y(I,C) = A \cdot X(K,L),$$

Gross Domestic Product in constant prices Y consists of outputs of investment goods I and consumption goods C. These products are produced from capital services K and labor services L. These factor services are components of Gross Domestic Income in constant prices X and are augmented by multifactor productivity A.

The key feature of the production possibility frontier is the explicit role it provides for changes in the relative prices of investment and consumption outputs. The aggregate production function, a competing methodology, gives a single output as a function of capital and labor inputs. There is no role for separate prices of investment and consumption goods. Under the assumption that product and factor markets are in competitive equilibrium, the share-weighted growth of outputs is the sum of the share-weighted growth of inputs and growth in multifactor productivity:

$$\overline{w}_I \Delta I + \overline{w}_C \Delta \ln C = \overline{v}_K \Delta \ln K + \overline{v}_L \Delta \ln L + \Delta \ln A,$$

where $\overline{w}$ and $\overline{v}$ denote average shares of the outputs and inputs, respectively, in the value of GDP in current prices.

[45] The international standards for aggregate growth accounting presented in Schreyer (2001) are discussed in detail by Jorgenson, Ho, and Stiroh (2005, pp. 17-58). The demise of traditional growth accounting is described by Jorgenson, Ho, and Stiroh (2005, pp. 49-58).

The average value shares for the two outputs, calculated from estimates of investment and consumption goods, are presented in current prices in table 2. The growth rates of these outputs are obtained from estimates in constant prices in table 16. Similarly, the average value shares for capital and labor inputs are calculated from the estimates of capital and labor services in current prices given in table 2. The growth rates of labor input are generated from the estimates in constant prices in table 17 and the growth rates of capital input from constant price estimates in table 20.

Table 29 presents accounts for U.S. economic growth during the period 1948-2006 and various sub-periods, following Jorgenson (2001). The earlier sub-periods are divided by the business cycle peak in 1973. The period since 1995, the beginning of a powerful resurgence in U.S. economic growth linked to information technology, is divided in 2000, the start of the dot-com crash. The contribution of each output is its growth rate weighted by the relative value share. Similarly, the contribution of each input is its weighted growth rate. Growth in multifactor productivity is the difference between growth rates of output and input.

The value shares of outputs and inputs are represented in figure 2. The shares of capital and labor inputs reveal little evidence of trends over the period 1948-2006. The share of investment has gradually declined, while the share of consumption has risen. Figure 3 depicts the contributions to U.S. economic growth by investment and consumption goods outputs and the sources of economic growth -- the contributions of capital and labor services and multifactor productivity. Capital input is the most important source of economic growth for the post-war period; labor input is next in importance and multifactor productivity the least important. Multifactor productivity growth contributed less than twenty percent of economic growth. For the period 1948-2006 the most important source of economic growth was capital services at 48.7 percent, while labor services contributed 31.3 percent.

The graphical picture of the growth the U.S. economy before and after 1973 reveals familiar features of the historical record. After strong output and productivity growth in the 1950s, 1960s and early 1970s, the U.S. economy slowed markedly from 1973 through 1995. Output growth fell from 4.01 to 2.81 percent and multifactor productivity growth declined precipitously from 1.00 to 0.27 percent. The contribution of capital input also slowed from 1.89 percent for 1948-73 to 1.42 percent for 1973-95, while the labor input contribution remained unchanged at 1.12 percent.

U.S. economic growth surged to 4.26 percent during the period 1995-2000. Between 1973-1995 and 1995-2000 the contribution of capital input jumped by 0.70 percentage points, accounting for almost half the increase in output growth of 1.45 percent. This reflects the investment boom of the late 1990s, as businesses, households, and governments poured resources into plant and equipment, especially computers, software, and communications equipment. The contribution of labor input increased by a relatively modest 0.14 percent, while multifactor productivity growth accelerated by 0.60 percent.

After the dot-com crash beginning in 2000, U.S. economic growth slowed substantially to 2.87 percent per year and the relative importance of investment declined sharply. The contribution of capital services to economic growth dropped by 0.69 percent per year, reverting to the level before 1995. The growth of multifactor productivity also declined, but not as sharply, to 0.73 percent per year, while the contribution of labor input sank to 0.61 percent per year.

In the absence of an integrated set of production accounts, the analysis of sources of economic growth at the aggregate and industry level would have to rely on a mixture of BEA industry accounts estimates and BLS productivity estimates, combined with an analyst's estimates of missing information, such as growth in labor input per hour worked. Different analysts could produce inconsistent results during periods of higher or lower growth, such as the post-1973 productivity slowdown and the more recent spurt in productivity growth since 1995.

The analysis of the uses of economic growth is based on the measures of income, expenditures, and the level of living from the Income and Expenditures Account presented in table 25. Expenditures include personal and government consumption and represent the flow of goods and services for current consumption. Expenditures also include saving, net of depreciation, corresponding to the increment in future flows of consumption during the current period.

Economic growth creates opportunities for both present and future consumption. These opportunities are generated by expansion in the supply of capital and labor services, augmented by changes in the level of living:

$$Z(C,S) = B \cdot W(L,N),$$

Net Domestic Expenditures in constant prices Z consist of consumption expenditures C and saving S, net of depreciation. These expenditures are generated by Net Incomes in constant prices W, comprising labor incomes L and property incomes N, also net of depreciation.

The level of living B must be carefully distinguished from multifactor productivity A. An increase in the level of living implies that for given supplies of the factor services that generate labor and property incomes, the U.S. economy generates greater opportunities for present and future consumption. The share-weighted growth of expenditures is the sum of the share-weighted growth of incomes and growth in the level of living:

$$\overline{w}_C \Delta \ln C + \overline{w}_S \Delta S = \overline{v}_L \Delta \ln L + \overline{v}_N \Delta \ln N + \Delta \ln B .$$

where $\overline{w}$ and $\overline{v}$ denote average value shares for expenditures and incomes, respectively.

The average shares for the two components of expenditures – consumption and saving are calculated from the estimates of personal consumption expenditures, government consumption expenditures, and net saving in current prices in table 4. The shares of labor and capital incomes are obtained from current price estimates of these incomes in the same table. The growth rates of expenditures are generated from the estimates in constant prices in table 22 and the growth rates of labor and property incomes from the constant price estimates in table 14. The level of living is given in table 25.

Table 30 presents a decomposition of the uses of economic growth for the period 1948-2006. The growth rate of expenditures is a weighted average of growth rates of personal consumption expenditures, government consumption expenditures, and net saving. The contribution of each category of expenditures is the growth rate weighted by the relative share. Similarly, the contributions of labor and property incomes are the growth rates weighted by the relative shares. Growth in the level of living is the difference between growth rates of expenditures and incomes.

The value shares of expenditures and incomes are represented in figure 4. The shares of capital and labor incomes, like the shares of capital and labor inputs in the Production Account, are stationary over the period 1948-2006. The share of personal consumption expenditures has gradually risen over this period, especially after 1973, while the share of government consumption first rose and then fell. Net saving has trended downward after 2000. Figure 5 shows the contributions to the growth of expenditures by supplies of capital and labor services and increases in the level of living. This figure also portrays current consumption and increments to future consumption through net saving.

The growth of net expenditures largely reflects the pattern of output growth with strong growth of expenditures during the period 1948-1973, followed by a slowdown after 1973, a sharp revival after 1995, and a further slowing after 2000. The growth of expenditures for the post-war period as a whole was 3.21 percent by comparison with output growth of 3.45 percent. The growth of expenditures rebounded by 1.22 percent per year during 1995-2000, while output jumped by 1.45 percent. Expenditures dropped by 1.54 percent after 2000, compared with the decline in output of 1.49 percent.

Net saving added a healthy 0.33 percent to growth of net expenditures during 1948-1973, but this contribution fell to 0.24 percent per year during 1973-1995, before jumping sharply to 0.60 percent during the investment boom of 1995-2000. The decline in saving after 1973 has attracted considerable attention, for example, in the work of William Gale and John Sablehaus (1999) and Marshall Reinsdorf (2005). However, the most arresting feature of the uses of economic growth is the precipitous drop in the contribution of net saving to -0.47 percent per year in 2000-2006. Net saving remained positive, but declined in magnitude during this period.

Further insight into the relationship between investment and saving is obtained from the Domestic Capital and Wealth Accounts presented in tables 26, 27, and 28. Gross

investment and gross saving are identical in both current and constant prices. Gross saving is reduced by depreciation to yield net saving. This is combined with revaluation to generate the change in wealth. Finally, wealth is comprised of private domestic tangible assets, government tangible assets, and the U.S. International Position.

The average value shares of private investment, government investment, and ROW investment are calculated from the estimates in current prices presented in table 8. The growth rates of these components of gross investment are obtained from the estimates in constant prices given in table 26. Similarly, the average value shares of depreciation and net saving are calculated from the current price estimates in table 9. The growth rates of these components of gross saving are generated from the constant price estimates in table 27.

One link from the Domestic Capital Account to the Domestic Wealth Account is net saving, a measure of change in the quantity of assets. A second link is revaluation, a measure of change in asset prices. The change in wealth presented in current prices in table 9 and the average value shares of net saving and revaluation are obtained from this table. The growth rates of the two components are calculated from the constant price estimates in table 27. Finally, the asset side of the Domestic Wealth Account is provided in current prices in table 13. The estimates in this table are utilized in generating average value shares of the three components. Growth rates are calculated from the constant price estimates in table 28.

Table 31 presents decompositions of gross investment and gross saving. The contribution of each component is its growth rate, weighted by the relative value share. The contribution of private investment is almost the same as the growth of gross investment for the period 1948-2006. The contribution of government investment nearly offsets the negative contribution of ROW investment. Throughout the post-war period foreigners have been accumulating assets in the U.S. faster that the U.S. has been accumulating assets abroad. In fact, the contribution of ROW investment was negative in all sub-periods, except 1973-1995, when it was very slightly positive.

The value shares of gross investment and gross saving are presented in figure 6. The share of private investment has been trending upward throughout the post-war period and exceeded one hundred percent of investment after 1995. Government investment peaked in the early 1950s and has been declining gradually. ROW investment was essentially zero until the early 1980s, dipped into negative territory until 1991, when it was positive for a single year, and then plunged deeper and deeper into the negative range through the end of the period in 2006. Net saving has been declining as a share of gross saving in current prices, while depreciation has been rising. This reflects the shift in the composition of investment toward shorter-lived assets, including information technology equipment and software.

Figure 7 depicts the contributions to capital formation by private investment, government investment, and ROW investment. Gross investment eased mildly from 3.68 percent in 1948-1973 to 3.67 percent in 1973-1995 and jumped to 5.89 percent during the

investment boom of 1995-2000 before dipping to 1.86 percent during 2000-2006. The average from 1995-2006 was slightly higher than during the rest of the post-war period.

Dramatic changes in the composition of gross investment took place after 1995. The contribution of private investment soared to 8.21 percent for 1995-2000 and then dropped sharply to 3.20 percent for 2000-2006. This reflects the spectacular boom in investment after 1995, powered by the surge of investment in information technology equipment and software. However, the rise in private investment was completely offset by a decline in the contribution of ROW investment, which sank from a positive 0.26 percent in 1973-1995 to a negative 2.80 percent in 1995-2000 and a negative 1.73 percent in 2000-2006.

By definition gross saving perfectly parallels gross investment. The contribution of depreciation has risen steadily throughout the post-war period, jumping sharply after 1995 as the composition of investment shifted toward short-lived assets. This eventually drove net saving into the negative range after 2000. A different perspective on net saving is presented in table 32, where the contributions of net saving and revaluation are combined to generate the change in wealth. The contribution of revaluation was relatively modest until 2000, when the rapid asset price inflation in real estate led to a stunning leap to an average annual rate of 15.09 percent per year. The magnitude of this asset price inflation did not appear in the NIPAs and went almost unnoticed.[46]

Finally, table 32 provides a decomposition of the growth of domestic wealth. The growth rate of domestic wealth attained a post-war high of 3.85 percent during 1948-1973, before declining to 2.17 percent during 1973-1995. Wealth grew at 2.30 percent during 1989-1995, but recovered to 2.70 percent in 1995-2006. The contribution of the U.S. International Investment Position was essentially zero from 1948-1973 before moving into the negative range, ultimately declining at 0.74 percent in 1995-2006. Private tangible assets increased in relative importance throughout the period.

The prototype system of accounts provides a useful perspective on the U.S. trade deficit. The key features are the accounting identity between national saving and investment and the trade deficit and the relationship between the trade deficit, net borrowings from abroad, and the U.S. international investment position. U.S. trade surpluses and net U.S. lending resulted in an international investment position that rose from 1.6 percent of wealth in 1948 to a peak of 3.0 percent in 1980. After that domestic demand, represented by expenditures, grew faster than supply, given by GDP, and trade surpluses turned to deficits. Net lending by the U.S. turned to net borrowing, so that by 1989 the international position was negative, falling to a negative 3.3 percent in 2006.

6. Summary and Conclusions.

The prototype for a consistent and integrated system of national accounts for the United States is limited to national aggregates and based on market transactions. The major innovation in the new architecture for the U.S. national accounts is the systematic

[46] Asset price inflation is compared for residential housing and common stocks by Case and Shiller (2003).

utilization of imputed rental prices for capital assets, based on the user cost formula introduced by Jorgenson (1963). This formula employs data from market transactions in assets to impute the rental values of capital services. This is the key to integration of the NIPAs generated by BEA with the BLS productivity accounts. The price and quantity of capital services also provide a valuable link between the NIPAs and the revised 1993 SNA.

Capital income is imputed to households, institutions, and governments, as well as corporations and non-corporate businesses, in order to achieve consistency with in investment goods production. The rental value of owner-occupied housing is imputed from the rental value of renter-occupied housing, following BEA. This imputation is based on market rental prices. The rental value of consumer durables, as well as durables and real estate owned by non-profit institutions, is imputed from market prices for the assets. A similar approach is employed for the rental value of government assets, including equipment and software, as well as government real estate.

Investment in consumer durables is excluded from household consumption, but included in the GDP, together with the imputed rental value of the services of the corresponding assets. A similar approach is employed for assets owned by non-profit institutions and the government sector. As a consequence of treating investment goods production and capital income symmetrically for household, government, and business sectors, the estimate of GDP in table 1 is nearly seven percent higher than the estimate of GDP given in the NIPAs.

The NIPAs present GDP in current and constant prices and GDI in current prices, while the Domestic Income and Product Account in the prototype system provides GDI in current and constant prices, as well as multifactor productivity, defined as the ratio of GDP in constant prices to GDI in constant prices. The Domestic Income and Product Account presented in table 2 gives the data required for the analysis of the sources of economic growth for the U.S. economy presented by Jorgenson (2001). The sources of economic growth are the contributions of labor and capital inputs and the growth of productivity.

The prototype system continues with a consolidated Income and Expenditures Account. Income includes proceeds from the sale of factor services, plus income receipts from the ROW less income payments, and net current taxes and transfers from the ROW. Expenditures include personal and government expenditures at market prices, plus net saving from the Domestic Capital Account. The Income and Expenditures Accounts consolidates three income and expenditures accounts from the NIPAs for household, business, and government income and expenditures. This has the advantage that payments among sectors cancel out in the consolidated account, resulting in a considerable simplification.

In order to provide data for an analysis of the disposition of income as expenditures and net saving, the Income and Expenditures Account is presented in both current and constant prices in table 25. The uses of economic growth include personal

consumption expenditures, government expenditures, and net saving. Net saving is generated in the Domestic Capital Account and the Foreign Transactions Capital Account and is equal to gross saving less depreciation. The level of living is defined as the ratio of Net Expenditures to Net Income. This gives current consumption and increments to future consumption in the current period as a proportion of the capital and labor services that generate the income that is required.

The Domestic Capital Account parallels the corresponding account in the NIPAs. Investment includes private domestic investment, government investment, and expenditures on durable goods by households and nonprofit institutions, all evaluated at market prices. The Domestic Capital Account presents the change in wealth, which is equal to the sum of net saving and the revaluation of assets. This provides a necessary link between the current economic activity reflected in the Domestic Income and Product Account and the Income and Expenditures Account and the accumulation of the wealth presented in the Wealth Account. The boundaries of these accounts are consistent throughout the prototype system of national accounts.

The Wealth Account, together with the Domestic Capital Account, is consistent with FRB Flow of Funds Accounts. The detailed accounts presented in the flow of funds and the national balance sheets for different financial sectors are consolidated. This simplifies the accounts for saving, investment, and wealth by eliminating claims among the domestic sectors, including household, government, and business sectors. The Foreign Transactions Current and Capital Accounts from the NIPAs, as well as the U.S. International Position, are taken from the NIPAs.

The creation of a new architecture for the U.S. national accounts will open new opportunities for development of the U.S. statistical system. The boundaries of the U.S. national accounts are defined by market and near-market activities included in the GDP. An example of a market-based activity is the rental of residential housing, while a near-market activity is the rental equivalent for owner-occupied housing. The new architecture project is not limited to these boundaries. Under the auspices of the National Research Council, the Committee on National Statistics has outlined a program for development of non-market accounts, covering areas such as health, education, household production, and the environment.[47]

New accounts for health and education could make use of new data sources, such as the American Time Use Survey (ATUS), recently instituted by BLS.[48] This survey provides detailed accounts for time use for the U.S. population. Jorgenson and Fraumeni have provided estimates of investment in human capital, including education.[49] An important part of investment in education is the value of time spent by students enrolled in educational programs. Since this time is not evaluated in the labor market, the value of

[47] The NRC report in summarized by Abraham and Mackie (2006). The conceptual framework for non-market accounts is presented by Nordhaus (2006).
[48] See the BLS website for details about ATUS: www.bls.gov/tus/.
[49] See Jorgenson (1996) and Fraumeni (2001).

investment in education is outside the boundary of the national accounts, but could be included in non-market accounts.

The Jorgenson-Fraumeni estimates of education incorporate a detailed system of demographic accounts for the U.S. population.[50] This includes a breakdown of the population by age, sex, education, and labor force status. Employed members of the labor force are included in the labor data base that underlies the prototype system of accounts developed by Jorgenson and Landefeld. Time spent in labor market activities is also included in the labor data base. Time spent in non-market activities, such as education, is included in the extended data base employed by Jorgenson and Fraumeni. BEA has recently undertaken a project to update the Jorgenson-Fraumeni estimates of investment in education as part of a program to measure the output of public educational institutions.

The National Health Expenditures Accounts generated by CMS could be extended to encompass non-market benefits of medical care, as proposed by David Cutler and his collaborators.[51] The outcomes of medical treatments are evaluated in terms of reduced mortality and additions to quality-adjusted life years (QALYs). The quality of life is assessed through the measurement of symptoms, impairments, and chronic conditions and their relationships to health ratings. Increments to the health of the population could be used as a measure of the output of the medical sector. Since the valuation of reduced mortality and additions to quality-adjusted life years takes place outside the market, this is a very useful complement to the market-based accounts for health expenditures maintained by CMS.

The economic dimension of well being is captured by the measure of income in constant prices employed by Jorgenson and Landefeld. The availability of data on time use would facilitate the implementation of measures that incorporate social and psychological dimensions of well being. For example, a System of National Well-Being Accounts has been proposed by Daniel Kahneman and Alan Krueger.[52] This is based on the Day Reconstruction Method in which time use is associated with domain-specific satisfaction. Measures of satisfaction can be compared over time and among groups of individuals to measure levels of well-being and their evolution over time.

BEA has recently extended the NIPAs to include a satellite account for investment in scientific research and development. Investment in software has been included in the core system of accounts since 1999. Corrado, Hulten, and Sichel (2006) have proposed a system of accounts for other intangible forms of investment.[53] They propose to include investments in scientific research and development and software, as well as minerals exploration, training of workers, advertising, and non-scientific research and development, such as the development of intellectual capital in the form of movies, music, and the like. Other than software and scientific research and development, none of

[50] See Land and McMillen (1981) for a system of demographic accounts for the U.S. population.
[51] See Cutler, Rosen, and Vijan (2006) and Jorgenson and Fraumeni (1996a and 1996b).
[52] See Kahneman, Krueger, Schkade, Schwarz, and Stone (2004).
[53] See Corrado, Hulten, and Sichel (2006).

these intangible investments is now included in the NIPAs or in a satellite system of accounts.

Finally, the EU KLEMS project has generated industry-level production accounts, like those described above for the U.S., for the economies of EU members and other major U.S. trading partners such as Australia, Canada, Japan, and Korea. These data will greatly facilitate international comparisons and research into the impact of globalization on the major industrialized economies. Efforts are also underway to extend the EU KLEMS framework to important developing and transition economies, such as Brazil, China, India, and Russia. This will open new opportunities for research on the impact of globalization.

References.

Abraham, Katharine, and Christopher Mackie. 2005. A Framework for Non-Market Accounting. In *A New Architecture for the U.S. National Accounts*, eds. Dale W. Jorgenson, J. Steven Landefeld, and William D. Nordhaus, 161-192. Chicago: University of Chicago Press.

Advisory Committee on Measuring Innovation in the 21st Century Economy. 2008. *Innovation Measurement: Tracking the State of Innovation in the American Economy.* Washington, DC: U.S. Department of Commerce, January.

Ark, Bart van, Mary O'Mahoney, and Marcel P. Timmer. 2008. The Productivity Gap between Europe and the United States: Trends and Causes. *Journal of Economic Perspectives* 22 (1): 25-44.

Bond, Charlotte Anne, Teran Martin, Susan Hume McIntosh, and Charles Ian Mead. 2007. Integrated Macroeconomic Accounts for the United States. *Survey of Current Business* 87 (11): 14-31.

Bureau of Economic Analysis (BEA). 2003. Fixed Assets and Durable Goods in the United States, 1925-99. Washington, DC: U.S. Department of Commerce, September.

____. 2008. BEA Rates of Depreciation, Service Lives, Declining-Balance Rates, and Hulten-Wykoff Categories. Washington, DC: U.S. Department of Commerce, February.

Bureau of Labor Statistics. 1983. *Trends in Multifactor Productivity, 1948-1981*. Washington, DC, U.S. Government Printing Office.

_____. 1993. Labor Composition and U.S. Productivity Growth, 1948-1990. *Bureau of Labor Statistics Bulletin 2426*. Washington, DC: U.S. Department of Labor.

_____. 2008. *American Time Use Survey*. Washington, DC: U.S. Department of Labor. www.bls.gov/tus/.

Case, Karl E., and Robert J. Shiller. 2003. Is There a Bubble in the Housing Market? *Brookings Papers on Economic Activity*, Issue 2: 299-362.

Centers for Medicare and Medicaid Services. *The National Health Expenditures Data.* Washington, DC: U.S. Department of Health and Human Services. www.cms.hhs.gov/NationalHealthExpendData/.

Christensen, Laurits R., and Dale W. Jorgenson. 1973. Measuring Economic Performance in the Private Sector. In *The Measurement of Economic and Social Performance*, ed. Milton Moss, 233-351. New York, Columbia University Press.

Corrado, Carol. 2003. Industrial Production and Capacity Utilization: The 2002 Historical and Annual Revision. *Federal Reserve Bulletin* 89 (4): 151-176.

Corrado, Carol, John Haltiwanger, and Daniel Sichel, eds. 2005. *Measuring Capital in the New Economy*. Chicago: University of Chicago Press.

Corrado, Carol, Charles R. Hulten, Daniel E. Sichel. 2006. Intangible Capital and Economic Growth. Working paper 11948. Cambridge, MA: NBER.

Cutler, David, Allison B. Rosen, and Sandip Vijan. 2006. The Value of Medical Spending in the United States. *New England Journal of Medicine* 355 (9): 920-927.

Diewert, W. Erwin. 1976. Exact and Superlative Index Numbers. *Journal of Econometrics* 4 (2): 115-46.

Doms, Mark 2005. Communications Equipment: What Has Happened to Prices? In *Measuring Capital in the New Economy*, eds. Carol Corrado, John Haltiwanger, and Daniel Sichel, 323-362. Chicago: University of Chicago Press.

Dulberger, Ellen R. 1989. The Application of a Hedonic Model to a Quality-Adjusted Price Index for Computer Processors. In *Technology and Capital Formation*, eds. Dale W. Jorgenson, and Ralph Landau, 37-76. Cambridge, MA, The MIT Press.

Financial Management Services. 2007. *Financial Report of the U.S. Government*. Washington, DC: U.S. Department of the Treasury. http://fms.treas.gov/fr/index.html.

Fisher, Irving 1922. *The Making of Index Numbers*. Boston, Houghton-Mifflin.

Flamm, Kenneth. 1989. Technological Advance and Costs: Computers versus Communications. In *Changing the Rules: Technological Change, International Competition, and Regulation in Communications*, eds. Robert C. Crandall and Kenneth Flamm, 13-61. Washington, DC: The Brookings Institution.

Fraumeni, Barbara M. 1997. The Measurement of Depreciation in the U.S. National Income and Product Accounts. *Survey of Current Business* 77 (7): 7-23.

_____. 2001. The Jorgenson System of National Accounting. In *Econometrics and the Cost of Capital*, ed. Lawrence J. Lau, 111-142. Cambridge, MA: The MIT Press.

Fraumeni, Barbara M., and Sumiye Okubo. 2001. Alternative Treatments of Consumer Durables in the National Accounts. Washington, DC: Bureau of Economic Analysis, May.

_____. 2005. R&D in the National Income and Product Accounts: A First Look at Its Effect on GDP. In *Measuring Capital in the New Economy*, eds. Carol Corrado, John Haltiwanger, and Daniel Sichel, 275-322. Chicago: University of Chicago Press.

Fraumeni, Barbara M., Michael Harper, Susan Powers, and Robert Yuscavage,. 2006. An Integrated BEA/BLS Production Account: A First Step and Theoretical Considerations. In *A New Architecture for the U.S. National Accounts*, eds. Dale W. Jorgenson, J. Steven Landefeld, and William D. Nordhaus, 355-438. Chicago: University of Chicago Press.

Gale, William G., and John Sabelhaus. 1999. Perspective on the Household Saving Rate. *Brooking Papers on Economic Activity*, Issue 1: 181-224.

Gordon, Robert J. 1990. *The Measurement of Durable Goods Prices*. Chicago: University of Chicago Press.

Grimm, Bruce T. 1997. Quality Adjusted Price Indexes for Digital Telephone Switches. Washington, DC: Bureau of Economic Analysis, May.

Hulten, Charles R. 1992. Account for the Wealth of Nations: The Net versus Gross Output Controversy and Its Ramifications. *Scandinavian Journal of Economics* 94 (Supplement): 9-24.

Hulten, Charles R., and Frank C. Wykoff. 1982. The Measurement of Economic Depreciation. In *Depreciation, Inflation and the Taxation of Income from Capital*, ed. Charles R. Hulten, 81-125. Washington, DC: Urban Institute Press.

Intersecretariat Working Group on National Accounts. 2009. Capital Services and the National Accounts. *Revision 1, 1993 SNA* (Chapter 20), forthcoming.

Jorgenson, Dale W. 1963. Capital Theory and Investment Behavior. *American Economic Review* 53 (2): 247-259.

_____. 1966. The Embodiment Hypothesis. *Journal of Political Economy* 74 (1): 1-17.

_____. 1996. *Postwar U.S. Economic Growth*. Cambridge, MA: The MIT Press.

_____. 2001. Information Technology and the U.S. Economy. *American Economic Review* 91 (1): 1-32.

Jorgenson, Dale W. and Barbara M. Fraumeni. 1996a. The Accumulation of Human and Nonhuman Capital, 1948-84. In *Postwar U.S. Economic Growth*, ed. Dale W. Jorgenson, 273-332. Cambridge, MA: The MIT Press.

Jorgenson, Dale W. and Barbara M. Fraumeni. 1996b. The Output of the Education Sector. In *Postwar U.S. Economic Growth*, ed. Dale W. Jorgenson, 333-370. Cambridge, MA: The MIT Press.

Jorgenson, Dale W., Frank M. Gollop, and Barbara M. Fraumeni. 1987. *Productivity and U.S. Economic Growth*. Cambridge, MA: Harvard University Press.

Jorgenson, Dale W., Mun S. Ho, and Kevin J., Stiroh. 2005. *Information Technology and the American Growth Resurgence*. Cambridge, MA: The MIT Press.

Jorgenson, Dale W., Mun S. Ho, Jon Samuels, and Kevin J. Stiroh. 2007. Industry Origins of the American Productivity Resurgence. *Economic Systems Research* 19 (3): 229-252.

Jorgenson, Dale W., and Ralph Landau, eds. 1989. *Technology and Capital Formation*. Cambridge, MA: The MIT Press.

Jorgenson, Dale W., J. Steven Landefeld, and William D. Nordhaus, eds. 2006. *A New Architecture for the U.S. National Accounts*. Chicago: University of Chicago Press.

Jorgenson, Dale W., and J. Steven Landefeld. 2006. Blueprint for Expanded and Integrated U.S. Accounts: Review, Assessment, and Next Steps. In *A New Architecture for the U.S. National Accounts*, eds. Dale W. Jorgenson, J. Steven Landefeld, and William D. Nordhaus, 13-112.

Jorgenson, Dale W., and Kevin J. Stiroh. 2000. Raising the Speed Limit: U.S. Economic Growth in the Information Age. *Brookings Papers on Economic Activity* Issue 1: 125-211.

Jorgenson, Dale W., and Kun-Young Yun. 2001. *Lifting the Burden.* Cambridge, MA: The MIT Press.

Kahneman, Daniel, Alan Krueger, David Schkade, Normert Schwarz, and Arthur Stone. 2004. Toward National Well-Being Accounts. *American Economic Review* 94 (2): 429-434.

Konus, Alexander A., and S. S. Byushgens. 1926. On the Problem of the Purchasing Power of Money. *Economic Bulletin of the Conjuncture Institute* Supplement: 151-72.

Kozlow, Ralph. 2006. Globalization, Offshoring, and Multinational Companies: What Are the Questions and How Well Are We Doing at Answering Them. Washington, DC: Bureau of Economic Analysis, January.

Land, Kenneth, and Marilyn McMillen. 1981. Demographic Accounts and the Study of Social Change, with Applications to Post-World War II United States. In *Social Accounting Systems*, eds. F. Thomas Juster and Kenneth Land, 242-306. New York: Academic Press.

Landefeld, J. Steven. 2000. GDP: One of the Great Inventions of the 20th Century. *Survey of Current Business* 80 (1): 6-14.

Landefeld, J. Steven, and Robert P. Parker. 1997. BEA's Chain Indexes, Time Series, and Measures of Long-Run Growth. *Survey of Current Business* 77 (5): 58-68.

Landefeld, J. Steven, Eugene P. Seskin, and Barbara M. Fraumeni. 2008. Taking the Pulse of the Economy: Measuring GDP. *Journal of Economic Perspectives* 22 (2): 193-216.

Lawson, Ann, Brian Moyer, Sumiye Okubo, and Mark Planting. 2006. Integrating Industry and National Economic Accounts: First Steps and Future Improvements. In *A New Architecture for the U.S. National Accounts*, eds. Dale W. Jorgenson, J. Steven Landefeld, and William D. Nordhaus, 215-262. Chicago: University of Chicago Press.

Mead, Charles Ian, Karin Moses, and Brent Moulton. 2004. The NIPAs and the System of National Accounts. *Survey of Current Business* 84 (12): 17-32.

Mesenbourg, Thomas L. 2006. Panel Remarks. In *A New Architecture for the U.S. National Accounts*, eds. Dale W. Jorgenson, J. Steven Landefeld, and William D. Nordhaus, 611-614. Chicago: University of Chicago Press.

Moulton, Brent R. 2000. Improved Estimates of the National Income and Product Accounts for 1929-99: Results of the Comprehensive Revision. *Survey of Current Business* 80 (4): 11-17, 36-145.

_____. 2004. The System of National Accounts for the New Economy: What Should Change? *Review of Income and Wealth* 50 (2): 261-278.

Moyer, Brian C., Marshall B. Reinsdorf, and Robert E. Yuscavage. 2006. Aggregation Issues in Integrating and Accelerating the BEA's Accounts: Improved Methods for Calculating GDP by Industry. In *A New Architecture for the U.S. National Accounts*, eds. Dale W. Jorgenson, J. Steven Landefeld, and William D. Nordhaus, 263-308. Chicago: University of Chicago Press.

Nordhaus, William D. 2006. Principles of National Accounting for Non-Market Accounts. In *A New Architecture for the U.S. National Accounts*, eds. Dale W. Jorgenson, J. Steven Landefeld, and William D. Nordhaus, 143-160. Chicago: University of Chicago Press.

Nordhaus, William D., and James Tobin. 1973. Is Growth Obsolete? . In *The Measurement of Economic and Social Performance*, ed. Milton Moss, 509-532. New York, Columbia University Press.

Oliner, Stephen D., and Daniel E. Sichel. 1994. Computers and Output Growth Revisited: How Big Is the Puzzle? *Brookings Papers on Economic Activity* Issue 2: 273-317.

_____. 2000. The Resurgence of Growth in the Late 1990s: Is Information Technology the Story? *Journal of Economic Perspectives* 14 (4): 3-22.

Parker, Robert P., and Bruce T. Grimm. 2000. Recognition of Business and Government Expenditures on Software as Investment: Methodology and Quantitative Impacts, 1959-98. Washington, DC: Bureau of Economic Analysis, November.

Reinsdorf, Marshall B. 2005. Saving, Wealth, Investment, and the Current-Account Deficit. *Survey of Current Business* 85 (4): 3.

Samuelson, Paul A. 1961. The Evaluation of "Social Income": Capital Formation and Wealth. In *The Theory of Capital*, eds. Friedrich A. Lutz and Douglas C. Hague, 31-57. London: Macmillan.

Schreyer, Paul. 2001. *Productivity Manual: A Guide to the Measurement of Industry-Level and Aggregate Productivity Growth.* Paris: Organisation for Economic Cooperation and Development, May.

_____. 2008. *OECD Manual: Measuring Capital.* Paris: Organisation for Economic Cooperation and Development, forthcoming.

Sensenig, Arthur, and Ernest Wilcox. 2001. National Health Accounts/National Income and Product Accounts Reconciliation: Hospital Care and Physician Services. In *Medical Care Output and Productivity*, eds. David M. Cutler and Ernst R. Berndt, 271-304. Chicago: University of Chicago Press.

Teplin, Albert M., Rochelle Antoniewicz, Susan Hume McIntosh, Michael Palumbo, Genevieve Solomon, Charles Ian Mead, Karin Moses, and Brent Moulton. 2006. Integrated Macroeconomic Accounts for the United States: Draft SNA-USA. In *A New Architecture for the U.S. National Accounts*, eds. Dale W. Jorgenson, J. Steven Landefeld, and William D. Nordhaus, 471-540. Chicago: University of Chicago Press.

Triplett, Jack E. 1989. Price and Technological Change in a Capital Good: Survey of Research on Computers. In *Technology and Capital Formation,* eds. Dale W. Jorgenson, and Ralph Landau, 127-213. Cambridge, MA, The MIT Press.

_____. 2004. *Handbook on Hedonic Indexes and Quality Adjustments in Price Indexes: Special Application to Information Technology Products.* Paris: Organisation for Economic Cooperation and Development.

_____ 2005. Performance Measures for Computers. In *Deconstructing the Computer*, eds. Dale W. Jorgenson and Charles Wessner, 99-143. Washington, DC: National Academy Press.

Triplett, Jack E., and Barry P. Bosworth. 2004. *Productivity in the U.S. Services Sector: New Sources of Economic Growth.* Washington, DC: Brookings Institution Press.

_____. 2006. Is the 21st Century Productivity Expansion Still in Services? And What Should Be Done About It? Washington, DC: The Brookings Institution, July.

United Nations, Commission of the European Communities, International Monetary Fund, Organisation for Economic Co-operation and Development, and World Bank. 1993. *System of National Accounts 1993.* Series F, no. 2, rev. 4. New York: United Nations.

United Nations Statistical Commission. 2007. *Report of the Intersecretariat Working Group on National Accounts.* Series E. CN.3/2007/7. New York: United Nations, Economic and Social Council, February-March.

Utgoff, Kathleen P. 2006. Panel Remarks. In *A New Architecture for the U.S. National Accounts*, eds. Dale W. Jorgenson, J. Steven Landefeld, and William D. Nordhaus, 614-614. Chicago: University of Chicago Press.

Wasshausen, Dave, and Brent Moulton. 2006. The Role of Hedonic Methods in Measuring Real GDP in the United States. Washington, DC: Bureau of Economic Analysis.

Weitzman, Martin L. 2003. *Income, Wealth, and the Maximum Principle*. Cambridge, MA: Harvard University Press.

Wilson, Karen. 2006. The Architecture of the System of National Accounts: A Three-Way Comparison of Canada, Australia, and the United Kingdom. In *A New Architecture for the U.S. National Accounts,* eds. Dale W. Jorgenson, J. Steven Landefeld, and William D. Nordhaus, 113-142. Chicago: University of Chicago Press.

Figure 1: New Architecture for an Expanded and Integrated Set of National Accounts for the United States

1. PRODUCTION

Gross Domestic Product Equals

Gross Domestic Factor Outlay

2. DOMESTIC RECEIPTS AND EXPENDITURES

Domestic Receipts Equal

Domestic Expenditure

3. FOREIGN TRANSACTION CURRENT ACCOUNT

Receipts from Rest of World Equal

Payments to Rest of World and

Balance on Current Account

4. DOMESTIC CAPITAL ACCOUNT

Gross Domestic Capital Formation Equals

Gross Domestic Savings

5. FOREIGN TRANSACTION CAPITAL ACCOUNT

Balance on Current Account Equals

Payments to Rest of the World and

Net Lending or Borrowing

6. DOMESTIC BALANCE SHEET

Domestic Wealth Equals

Domestic Tangible Assets and

U.S. Net International Position

7. U.S. INTERNATIONAL POSITION

U.S.-Owned Assets Abroad Equal

Foreign-Owned Assets in U.S. and

U.S. Net International Position

Figure 2: Output and Input Shares

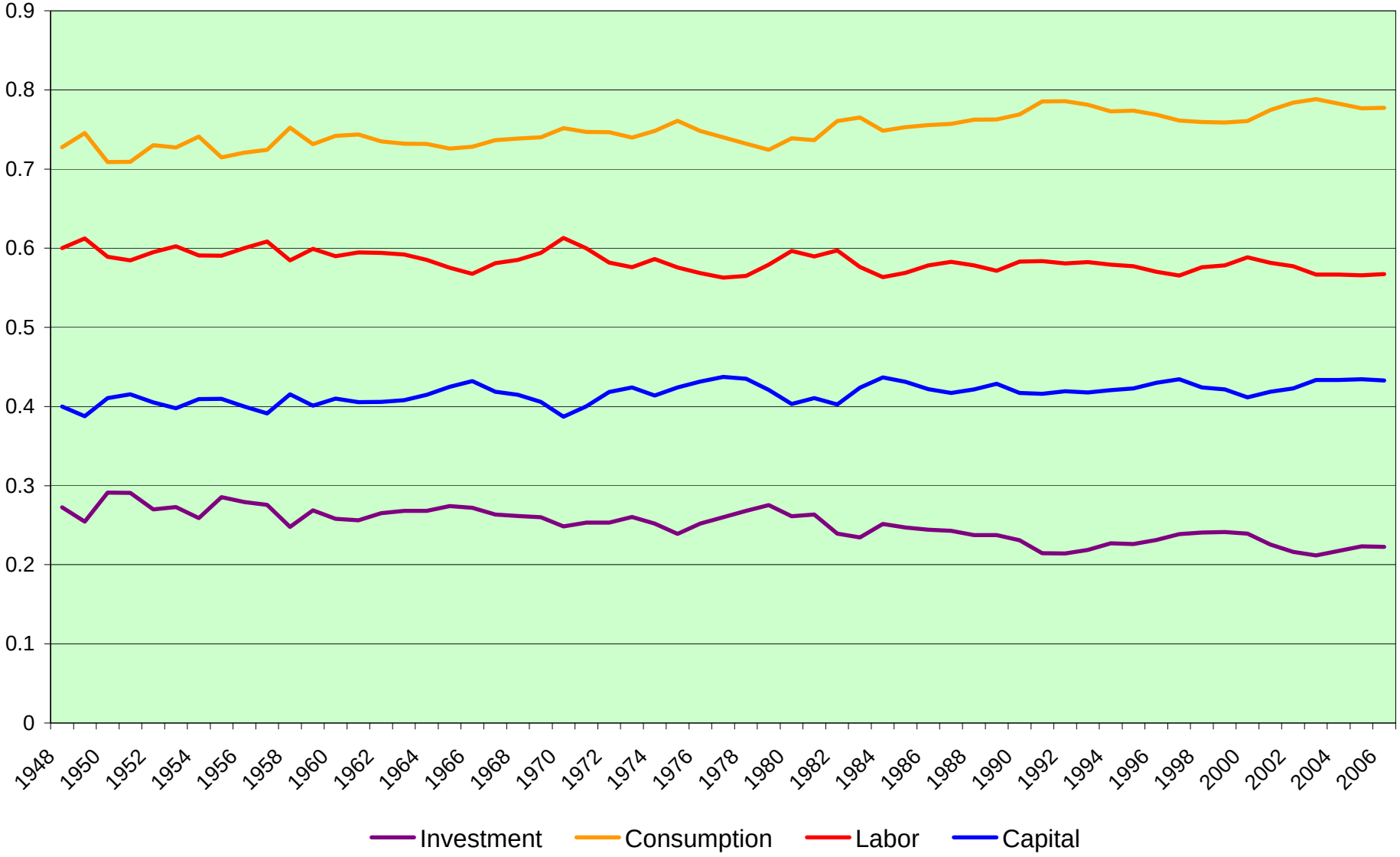

Figure 3: Contributions to Output and Economic Growth

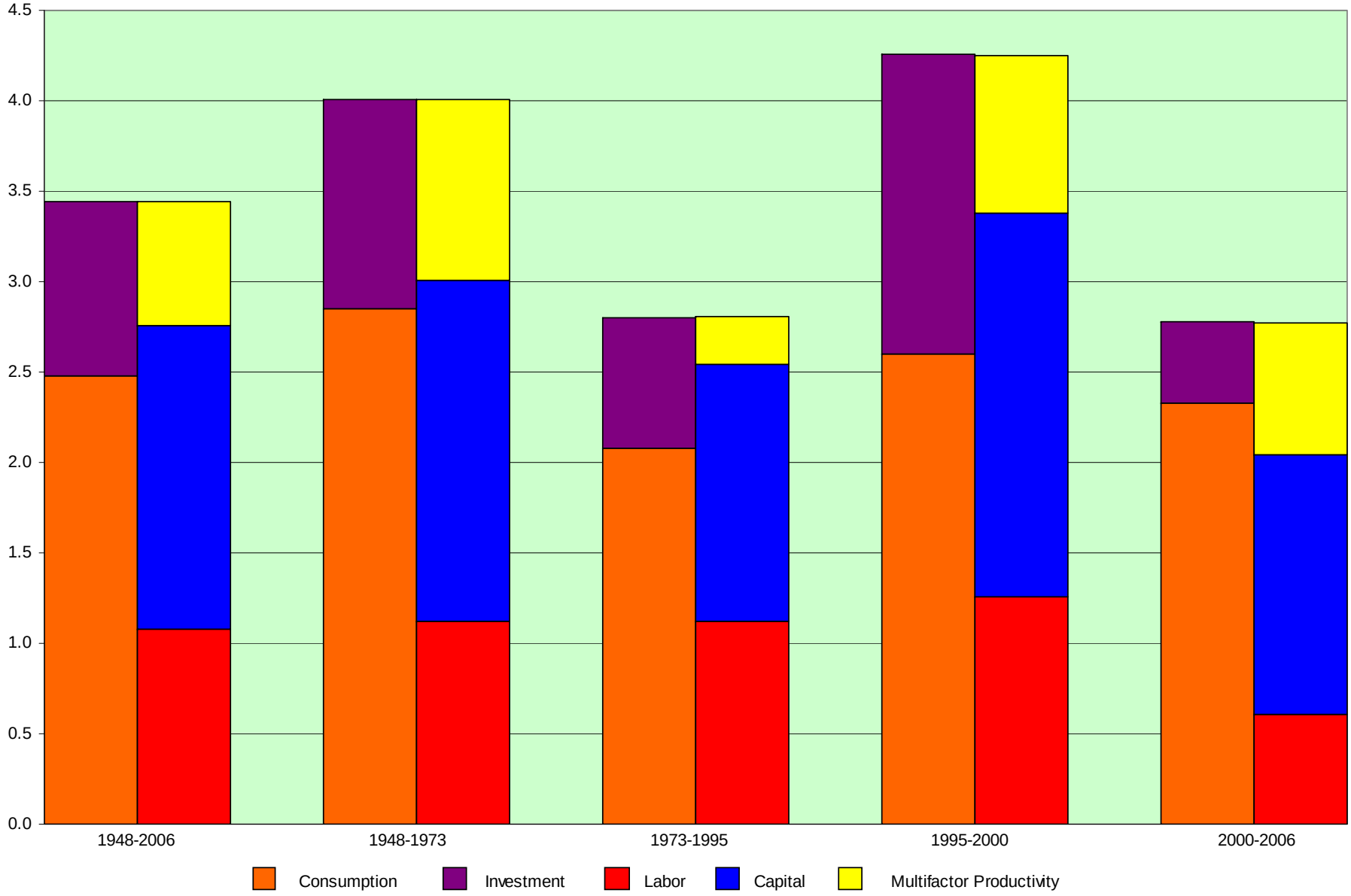

Figure 4: Income and Expenditure Shares

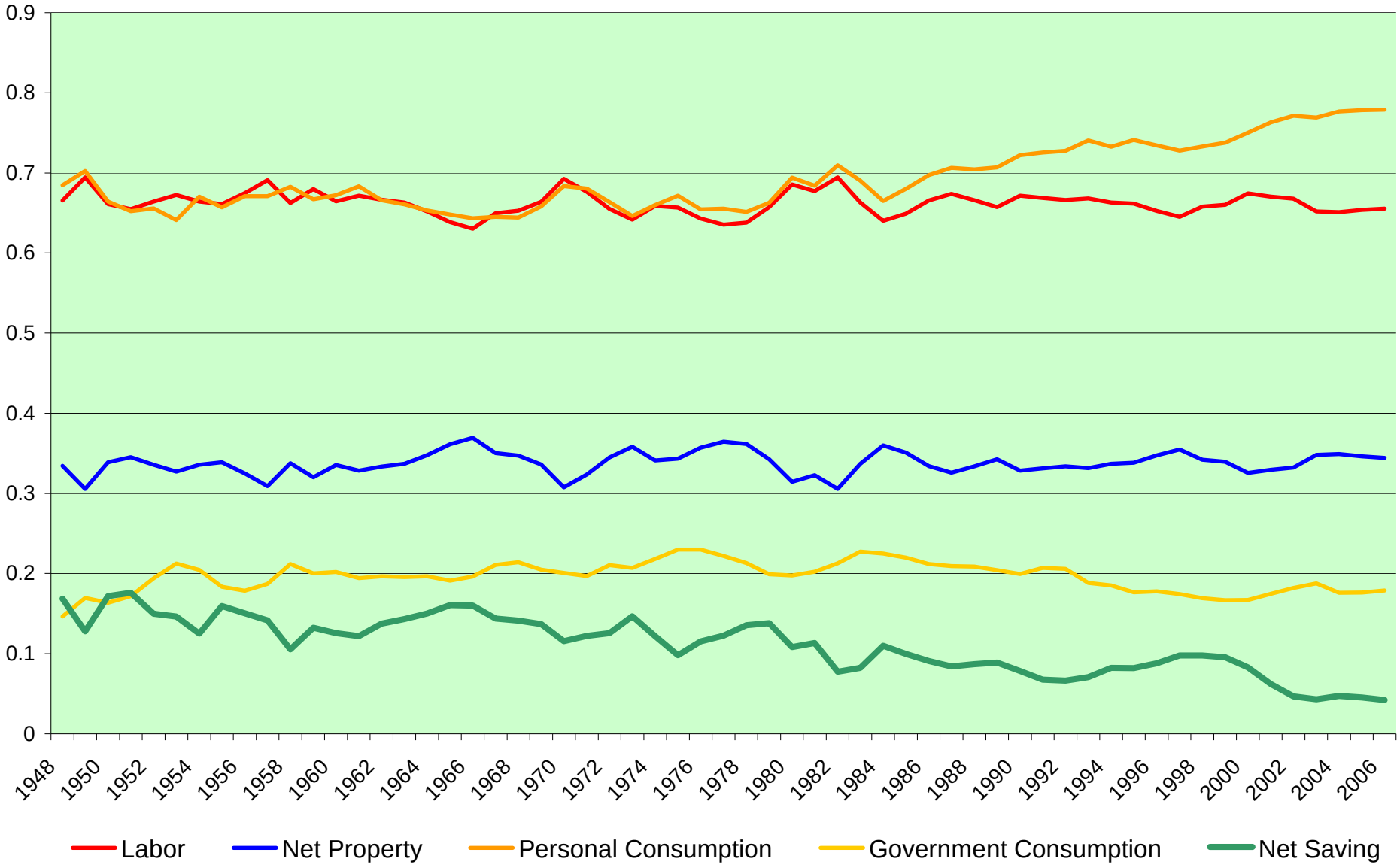

Figure 5: Contributions to Net Expenditure and Income

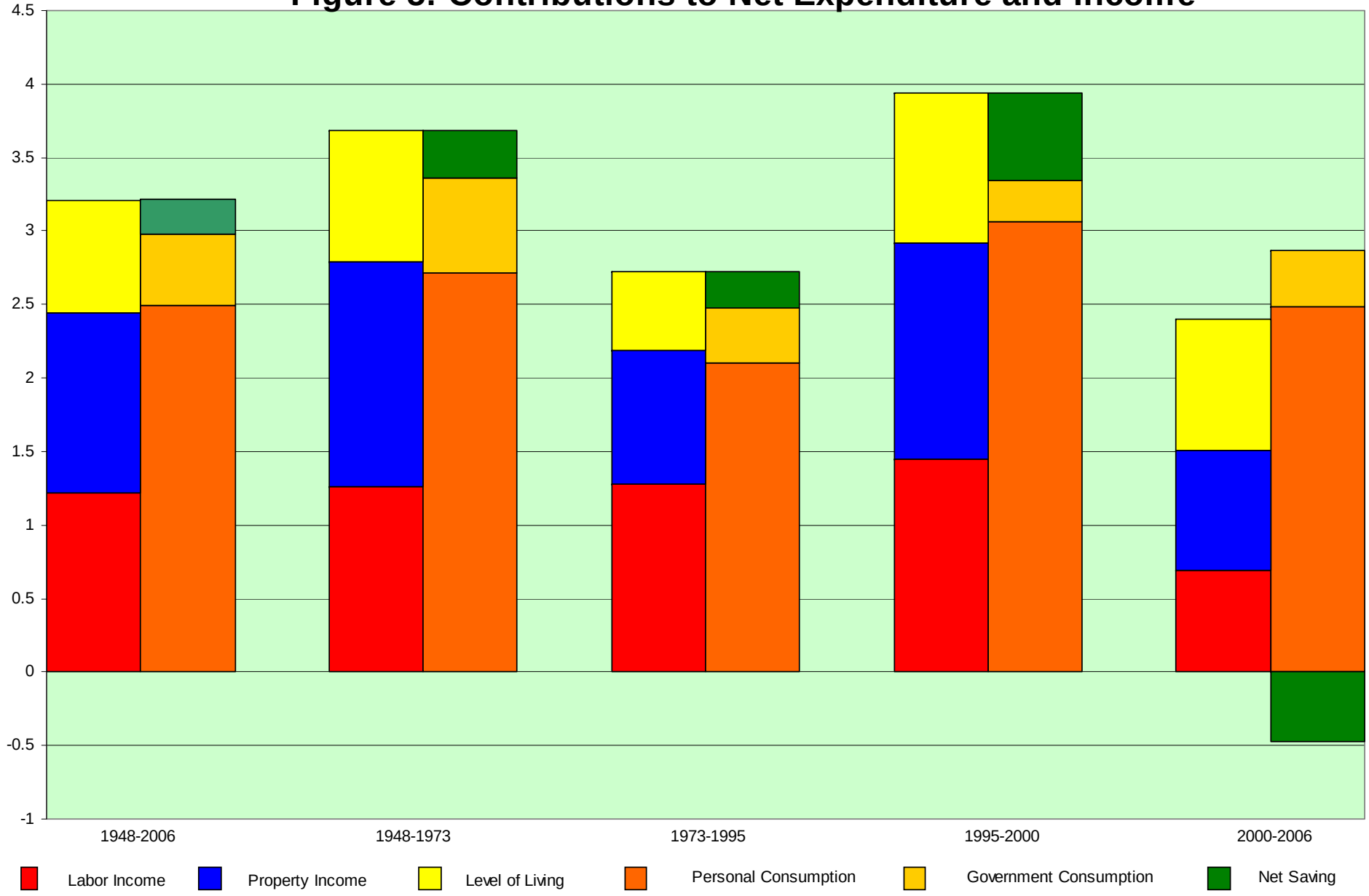

Figure 6: Investment and Saving Shares

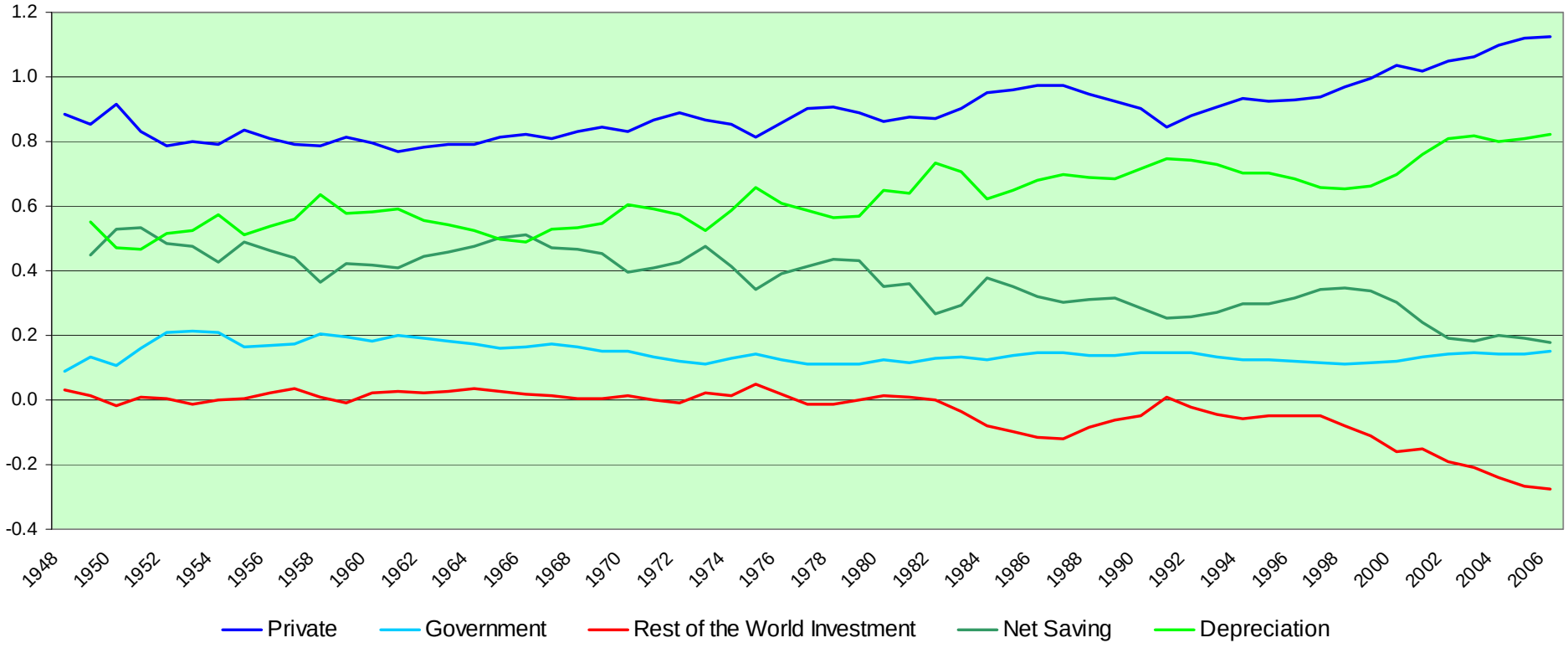

Figure 7: Contributions to Investment and Saving

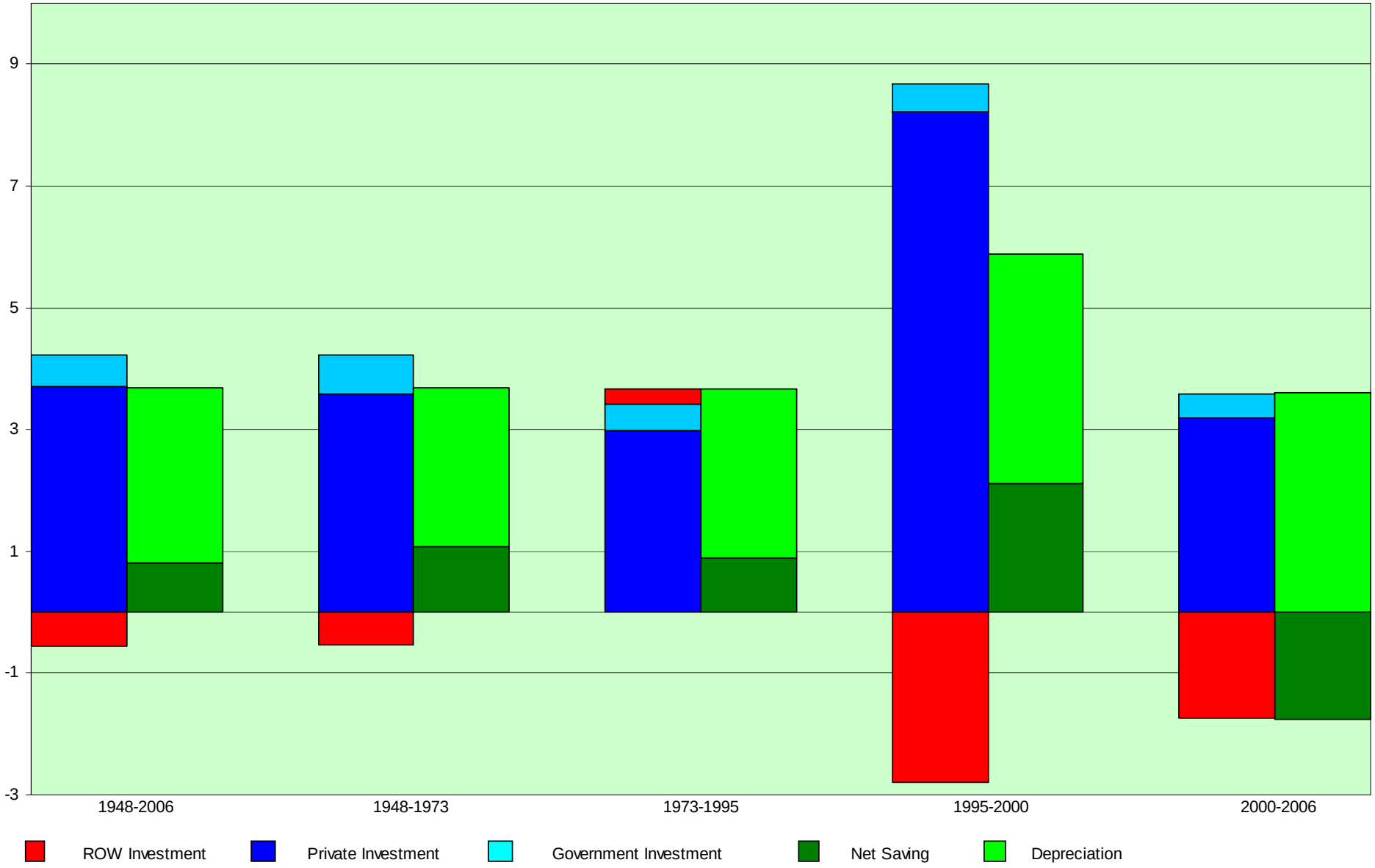

Table 1: Domestic Income and Product Account, 2006

Line		Product	Source	Total
1		GDP (NIPA)	NIPA 1.1.5 line 1	13,194.7
2	+	Services of consumers' durables	our imputation	1,261.4
3	+	Services of durables held by institutions	our imputation	38.8
4	+	Services of durables, structures, land, and inventories held by government	our imputation	354.7
5	-	General government consumption of fixed capital	NIPA 3.10.5 line 5	223.6
6	-	Government enterprise consumption of fixed capital	NIPA 3.1 line 38 - 3.10.5 line 5	44.1
7	-	Federal taxes on production and imports	NIPA 3.2 line 4	98.6
8	-	Federal current transfer receipts from business	NIPA 3.2 line 16	20.0
9	-	S&L taxes on production and imports	NIPA 3.3 line 6	868.8
10	-	S&L current transfer receipts fom business	NIPA 3.3 line 18	40.6
11	+	Capital stock tax	-	0.0
12	+	MV tax	NIPA 3.5 line 28	8.2
13	+	Property taxes	NIPA 3.3 line 8	367.8
14	+	Severance, special assessments, and other taxes	NIPA 3.5 line 29,30,31	77.2
15	+	Subsidies	NIPA 3.1 line 25	49.7
16	-	Current surplus of government enterprises	NIPA 3.1 line 14	-13.9
17	=	Gross domestic product		14,070.7

Line		Income	Source	Total
1	+	Consumption of fixed capital	NIPA 5.1 line 13	1,615.2
2	+	Statistical discrepancy	NIPA 5.1 line 26	-18.1
3	+	Services of consumers' durables	our imputation	1,261.4
4	+	Services of durables held by institutions	our imputation	38.8
5	+	Services of durables, structures, land, and inventories held by government	our imputation	354.7
6	-	General government consumption of fixed capital	NIPA 3.10.5 line 5	223.6
7	-	Government enterprise consumption of fixed capital	NIPA 3.1 line 38 - 3.10.5 line 5	44.1
8	+	National income	NIPA 1.7.5 line 16	11,655.6
9	-	ROW income	NIPA 1.7.5 line 2-3	58.0
10	-	Sales tax	Product Account	574.8
11	+	Subsidies	NIPA 3.1 line 25	49.7
12	-	Current surplus of government enterprises	NIPA 3.1 line 14	-13.9
13	=	Gross domestic income		14,070.7

Table 2: Domestic Income and Product Account, 1948-2006

(Billions of C Labor Income, 1948-2006

Year	Gross Domestic Product	Investment Goods Product	Consumption Goods Product	Labor Income	Capital Income
1948	288.6	78.7	209.9	173.2	114.7
1949	283.6	72.2	211.5	173.6	109.2
1950	317.4	92.4	225.0	187.0	129.5
1951	365.4	106.3	259.1	213.6	151.2
1952	384.4	103.8	280.6	228.7	155.3
1953	405.7	110.7	295.0	244.4	161.2
1954	413.9	107.2	306.7	244.5	169.7
1955	444.9	127.0	318.0	262.7	182.3
1956	472.7	131.9	340.7	283.6	189.6
1957	488.8	134.8	354.0	297.5	190.7
1958	511.9	126.8	385.2	299.3	213.0
1959	539.8	145.0	394.8	323.5	216.4
1960	575.5	148.4	427.1	339.5	235.8
1961	586.5	150.3	436.2	348.7	237.5
1962	625.0	165.7	459.3	371.3	253.8
1963	656.9	176.0	480.9	388.9	267.8
1964	711.2	190.7	520.5	416.2	294.9
1965	776.5	212.8	563.7	446.6	329.9
1966	863.5	234.7	628.7	490.3	373.2
1967	899.1	236.8	662.3	522.6	376.6
1968	982.7	257.1	725.6	575.2	407.4
1969	1,064.0	276.5	787.5	632.1	432.1
1970	1,098.3	272.8	825.4	673.1	424.9
1971	1,199.0	303.5	895.5	719.0	480.0
1972	1,356.7	343.8	1,012.9	789.3	567.3
1973	1,529.6	398.2	1,131.4	880.9	648.8
1974	1,648.2	415.4	1,232.8	966.1	682.0
1975	1,788.0	427.2	1,360.8	1,029.5	758.4
1976	2,018.4	508.6	1,509.8	1,147.5	871.0
1977	2,273.1	590.8	1,682.4	1,279.4	993.9
1978	2,564.2	687.2	1,876.9	1,448.6	1,115.3
1979	2,811.7	774.9	2,036.8	1,628.4	1,183.5
1980	3,004.4	784.8	2,219.6	1,792.6	1,211.5
1981	3,359.5	884.9	2,474.6	1,980.5	1,379.3
1982	3,499.3	837.4	2,661.9	2,090.2	1,408.9
1983	3,851.7	904.1	2,947.6	2,219.2	1,632.6
1984	4,345.9	1,093.7	3,252.2	2,447.9	1,898.1
1985	4,615.3	1,140.8	3,474.5	2,626.0	1,989.2
1986	4,816.5	1,176.9	3,639.5	2,785.0	2,031.9
1987	5,110.5	1,241.1	3,869.4	2,978.8	2,131.5
1988	5,557.3	1,320.5	4,236.7	3,214.1	2,343.0
1989	5,954.9	1,413.9	4,541.0	3,402.5	2,552.6
1990	6,217.5	1,436.3	4,781.2	3,625.1	2,592.6
1991	6,418.6	1,377.3	5,041.3	3,747.4	2,670.8
1992	6,790.0	1,454.2	5,335.8	3,943.7	2,846.1
1993	7,090.0	1,551.8	5,538.2	4,129.1	2,960.9
1994	7,503.4	1,704.8	5,798.7	4,346.7	3,156.6
1995	7,882.6	1,782.7	6,099.9	4,550.9	3,331.7
1996	8,356.9	1,934.0	6,422.9	4,764.6	3,592.6
1997	8,933.6	2,132.5	6,801.1	5,051.9	3,881.7
1998	9,418.3	2,267.0	7,151.3	5,423.7	3,994.3
1999	9,987.6	2,409.1	7,578.5	5,776.1	4,211.6
2000	10,569.0	2,528.6	8,040.4	6,220.7	4,348.7
2001	10,979.6	2,475.9	8,503.7	6,383.3	4,596.3
2002	11,316.1	2,446.2	8,869.9	6,532.0	4,784.1
2003	11,991.6	2,539.0	9,452.7	6,796.0	5,195.6
2004	12,617.9	2,743.2	9,874.8	7,149.7	5,468.5
2005	13,339.7	2,979.8	10,359.9	7,545.9	5,793.9
2006	14,070.8	3,132.4	10,938.4	7,980.3	6,090.7

Table 3: Income and Expenditures Account, 2006

Line	Income	Source	Total
1	+ Gross income	Product Account	14,070.7
2	+ Production taxes	Product Account	574.8
3	- Subsidies	NIPA 3.1 line 25	49.7
4	+ Current surplus of government enterprises	NIPA 3.1 line 14	-13.9
5	= Gross domestic income at market prices		14,581.9
6	+ Income receipts from the rest of the world	NIPA 1.7.5 line 2	691.4
7	- Income payments to the rest of the world	NIPA 1.7.5 line 3	633.4
8	- Current taxes and transfers to the rest of the world (net)	NIPA 4.1 line 25	90.1
9	= Gross income		14,549.8
10	- Depreciation	our imputation	2,385.4
11	= Net income		12,164.5

Line	Expenditures	Source	Total
1	+ Personal consumption expenditures		9,475.8
2	PCE nondurable goods (NIPA)	NIPA 2.3.5 line 6	2,688.0
3	PCE services (NIPA)	NIPA 2.3.5 line 13	5,487.6
4	PCE services less space rental value of inst building and nonfarm dwellings	our imputation	4,574.2
5	Services of consumers' durables	our imputation	1,261.4
6	Services of structures and land	our imputation	913.4
7	Services of durables held by institutions	our imputation	38.8
8	+ Government consumption expenditures		2,176.4
9	Government consumption nondurable goods	NIPA 3.10.5 line 8	239.5
10	Government intermediate purchases, durable goods	NIPA 3.10.5 line 7	60.3
11	Government consumption services total		314.3
12	Government consumption services	NIPA 3.10.5 line 9	640.2
13	Less sales to other sectors	NIPA 3.10.5 line 11	325.9
14	Services of durables, structures, land, and inventories held by government	our imputation	354.7
15	Less government enterprise consumption of fixed capital	NIPA 3.1 line 38 - 3.10.5 line 5	44.1
16	Government compensation of employees exluding force account labor	NIPA 3.10.5 line 4-10	1,251.7
17	+ Gross national saving and statistical discrepancy	Capital Account	2,897.8
	- Depreciation	our imputation	2,385.4
18	= Net domestic expenditures		12,164.7

Table 4: Income and Expenditures Account, 1948-2006

*(Billions o)***or Income, 1948-2006**

Year	Net Income	Labor Income	Net Capital Income	Personal Consumption Expenditures	Government Consumption Expenditures	Net Saving and Statistical Discrepancy
1948	260.3	173.2	87.0	178.2	38.1	43.9
1949	250.2	173.7	76.5	175.7	42.4	32.0
1950	283.1	187.1	96.0	188.1	46.3	48.6
1951	326.3	213.6	112.7	212.8	56.1	57.4
1952	344.3	228.7	115.6	225.8	66.9	51.5
1953	363.3	244.4	118.9	232.9	77.2	53.1
1954	368.1	244.5	123.6	246.7	75.3	46.1
1955	397.2	262.6	134.6	260.9	72.9	63.4
1956	420.1	283.5	136.6	281.8	75.0	63.1
1957	430.4	297.4	133.0	288.8	80.6	60.9
1958	451.7	299.2	152.6	308.4	95.8	47.4
1959	475.7	323.4	152.3	317.4	95.3	63.2
1960	510.6	339.4	171.3	343.2	103.2	64.4
1961	519.0	348.6	170.4	354.7	101.0	63.4
1962	557.0	371.2	185.7	370.8	109.5	76.9
1963	586.5	388.9	197.6	387.6	114.8	84.3
1964	638.3	416.2	222.1	416.8	125.6	96.0
1965	699.6	446.7	252.9	453.5	133.7	112.5
1966	777.7	490.3	287.4	500.4	152.8	124.4
1967	804.5	522.6	281.9	519.1	169.7	115.7
1968	881.1	575.2	305.9	567.7	188.7	124.8
1969	952.2	632.2	320.1	626.7	195.1	130.5
1970	972.2	673.2	299.0	664.5	195.3	112.5
1971	1,062.9	719.0	343.9	723.3	209.5	130.1
1972	1,205.0	789.3	415.8	799.7	253.7	151.7
1973	1,372.7	880.9	491.8	887.0	284.3	201.3
1974	1,466.4	966.1	500.3	967.4	320.2	178.9
1975	1,567.9	1,029.5	538.4	1,053.2	360.7	153.9
1976	1,784.4	1,147.4	636.9	1,167.7	410.7	206.0
1977	2,014.0	1,279.4	734.6	1,319.9	447.0	247.1
1978	2,270.4	1,448.5	821.9	1,478.7	484.0	307.8
1979	2,477.7	1,628.4	849.3	1,641.9	493.7	342.1
1980	2,614.7	1,792.5	822.2	1,815.3	516.6	283.0
1981	2,924.4	1,980.4	944.0	2,000.5	592.1	331.8
1982	3,009.3	2,090.0	919.2	2,134.9	640.8	233.7
1983	3,347.7	2,219.1	1,128.7	2,311.0	761.2	275.4
1984	3,823.7	2,447.7	1,376.0	2,542.9	860.5	420.2
1985	4,045.3	2,625.8	1,419.5	2,751.6	889.9	403.6
1986	4,180.8	2,783.2	1,397.6	2,915.5	885.5	379.9
1987	4,418.0	2,977.4	1,440.5	3,120.6	925.1	372.5
1988	4,824.6	3,213.2	1,611.3	3,398.5	1,006.9	419.2
1989	5,174.9	3,401.2	1,773.7	3,657.9	1,056.8	460.3
1990	5,395.6	3,622.8	1,772.8	3,896.6	1,075.9	423.2
1991	5,600.1	3,744.7	1,855.4	4,061.2	1,160.8	378.1
1992	5,915.0	3,940.7	1,974.3	4,303.2	1,218.4	393.2
1993	6,174.5	4,125.8	2,048.7	4,572.8	1,163.6	438.1
1994	6,550.5	4,342.7	2,207.8	4,799.5	1,213.0	538.2
1995	6,871.5	4,546.8	2,324.7	5,093.6	1,214.7	563.3
1996	7,296.0	4,760.4	2,535.6	5,355.7	1,298.7	641.4
1997	7,822.1	5,047.5	2,774.6	5,692.0	1,365.1	765.1
1998	8,236.8	5,419.1	2,817.7	6,036.5	1,394.6	805.9
1999	8,740.1	5,770.9	2,969.2	6,446.6	1,458.8	834.8
2000	9,217.9	6,216.1	3,001.8	6,914.1	1,540.7	762.9
2001	9,513.4	6,378.1	3,135.3	7,259.7	1,662.5	591.3
2002	9,772.7	6,526.6	3,246.2	7,539.3	1,777.7	455.7
2003	10,418.2	6,790.3	3,627.9	8,011.4	1,956.1	450.9
2004	10,972.9	7,143.6	3,829.4	8,522.6	1,929.5	520.7
2005	11,530.5	7,539.4	3,991.1	8,975.1	2,031.7	523.8
2006	12,164.5	7,973.8	4,190.7	9,475.8	2,176.4	512.3

Table 5: Foreign Transactions Current Account, 2006

Line	Receipts from the Rest of the World	Source	Total
1	+ Exports of goods and services	NIPA 4.1 line 2	1,467.6
2	+ Income receipts from the rest of the world	NIPA 4.1 line 7	691.4
3	Wage and salary receipts	NIPA 4.1 line 8	2.9
4	Income receipts on assets	NIPA 4.1 line 9	688.6
5	= Current receipts from the rest of the world	NIPA 4.1 line 1	2,159.0

Line	Payments to the Rest of the World and Balance on Current Account	Source	Total
1	+ Imports of goods and services	NIPA 4.1 line 14	2,229.6
2	+ Income payments to the rest of the world	NIPA 4.1 line 19	633.4
3	Wage and salary payments	NIPA 4.1 line 20	9.4
4	Income payments on assets	NIPA 4.1 line 21	624.0
5	+ Current taxes and transfer payments to the rest of the world (net)	NIPA 4.1 line 25	90.1
6	+ Balance on current account	NIPA 4.1 line 29	-794.1
7	= Current payments to the rest of the world and balance on current account		2,159.0

Table 6: Foreign Transactions Current Account, 1948-2006

(Billions o **Income, 1948-2006**

Year	Balance on Current Account	Current Receipts from the ROW	Exports of Goods and Services	Income Receipts from the ROW	Currents Payments to ROW and Balance on Current Account	Imports of Goods and Services	Income Payments to ROW	Current Taxes and Transfers to ROW (net)
1948	2.4	17.6	15.5	2.0	17.6	10.1	0.6	4.5
1949	0.9	16.4	14.5	1.9	16.5	9.2	0.7	5.6
1950	-1.8	14.5	12.4	2.2	14.6	11.6	0.7	4.0
1951	0.9	19.9	17.1	2.8	19.9	14.6	0.9	3.5
1952	0.6	19.3	16.5	2.9	19.3	15.3	0.9	2.5
1953	-1.3	18.2	15.3	2.8	18.1	16.0	0.9	2.5
1954	0.2	18.9	15.8	3.0	18.8	15.4	0.9	2.3
1955	0.4	21.2	17.7	3.5	21.1	17.2	1.1	2.5
1956	2.8	25.2	21.3	3.9	25.3	18.9	1.1	2.4
1957	4.8	28.3	24.0	4.3	28.3	19.9	1.2	2.3
1958	0.9	24.4	20.6	3.9	24.4	20.0	1.2	2.3
1959	-1.2	27.0	22.7	4.3	27.0	22.3	1.5	4.3
1960	3.2	31.9	27.0	4.9	31.9	22.8	1.8	4.1
1961	4.3	32.9	27.6	5.3	32.9	22.7	1.8	4.2
1962	3.9	35.0	29.1	5.9	35.0	25.0	1.8	4.3
1963	5.0	37.6	31.1	6.5	37.6	26.1	2.1	4.4
1964	7.5	42.3	35.0	7.2	42.2	28.1	2.3	4.3
1965	6.2	45.0	37.1	7.9	45.0	31.5	2.6	4.7
1966	3.9	49.0	40.9	8.1	49.0	37.1	3.0	5.0
1967	3.6	52.1	43.5	8.7	52.2	39.9	3.3	5.4
1968	1.7	58.0	47.9	10.1	58.0	46.6	4.0	5.7
1969	1.8	63.7	51.9	11.8	63.7	50.5	5.7	5.8
1970	4.0	72.5	59.7	12.8	72.5	55.8	6.4	6.3
1971	0.6	77.0	63.0	14.0	77.0	62.3	6.4	7.6
1972	-3.6	87.1	70.8	16.3	87.1	74.2	7.7	8.8
1973	9.3	118.8	95.3	23.5	118.8	91.2	10.9	7.4
1974	6.6	156.5	126.7	29.8	156.4	127.5	14.3	8.1
1975	21.4	166.7	138.7	28.0	166.8	122.7	15.0	7.6
1976	8.9	181.9	149.5	32.4	181.9	151.1	15.5	6.3
1977	-9.0	196.6	159.4	37.2	196.6	182.4	16.9	6.2
1978	-10.4	233.1	186.9	46.3	233.2	212.3	24.7	6.7
1979	1.4	298.5	230.1	68.3	298.4	252.7	36.4	8.0
1980	11.4	359.9	280.8	79.1	359.9	293.8	44.9	9.8
1981	6.3	397.3	305.2	92.0	397.2	317.8	59.1	14.1
1982	-0.2	384.2	283.2	101.0	384.2	303.2	64.5	16.7
1983	-32.1	378.9	277.0	101.9	378.8	328.6	64.8	17.5
1984	-86.9	424.2	302.4	121.9	424.3	405.1	85.6	20.5
1985	-110.8	414.5	302.0	112.4	414.5	417.2	85.9	22.2
1986	-139.2	431.9	320.5	111.4	432.0	453.3	93.6	24.3
1987	-150.8	487.1	363.9	123.2	487.1	509.1	105.3	23.5
1988	-112.2	596.2	444.1	152.1	596.2	554.5	128.5	25.5
1989	-88.3	681.0	503.3	177.7	681.0	591.5	151.5	26.4
1990	-70.1	741.5	552.4	189.1	741.4	630.3	154.3	26.9
1991	13.5	765.7	596.8	168.9	765.8	624.3	138.5	-10.6
1992	-36.9	788.0	635.3	152.7	788.0	668.6	123.0	33.4
1993	-70.4	812.1	655.8	156.2	812.1	720.9	124.3	37.3
1994	-105.2	907.3	720.9	186.4	907.3	814.5	160.2	37.8
1995	-91.0	1,046.1	812.2	233.9	1,046.1	903.6	198.1	35.4
1996	-100.3	1,117.3	868.6	248.7	1,117.3	964.8	213.7	39.1
1997	-110.2	1,242.0	955.3	286.7	1,242.0	1,056.9	253.7	41.6
1998	-187.4	1,243.1	955.9	287.1	1,243.1	1,115.9	265.8	48.8
1999	-273.9	1,312.1	991.2	320.8	1,312.0	1,251.7	287.0	47.2
2000	-396.6	1,478.9	1,096.3	382.7	1,479.0	1,475.8	343.7	56.1
2001	-370.4	1,355.2	1,032.8	322.4	1,355.2	1,399.8	278.8	47.0
2002	-458.3	1,311.6	1,005.9	305.7	1,311.6	1,430.3	275.0	64.5
2003	-512.3	1,377.6	1,040.8	336.8	1,377.5	1,540.2	280.0	69.7
2004	-624.1	1,619.9	1,182.4	437.5	1,619.9	1,797.8	361.3	84.9
2005	-735.1	1,853.5	1,309.4	544.1	1,853.4	2,023.9	475.6	89.0
2006	-794.1	2,159.0	1,467.6	691.4	2,159.1	2,229.6	633.4	90.1

Table 7: Domestic Capital Account, 2006

Line	Investment	Source	Total
1	+ Private fixed investment, nonresidential structures	NIPA 5.4.5 line 2	405.1
2	+ Private fixed investment, equipment and software	NIPA 5.5.5 line 1	1,002.2
3	+ Change in private inventories, nonfarm	NIPA 5.6.5 line 19	47.8
4	+ Change in private inventories, farm	NIPA 5.6.5 line 2	-1.2
5	+ Private fixed investment, residential structures	NIPA 5.4.5 line 35	755.2
6	+ Personal consumption expenditures, durable goods	NIPA 1.1.5 line 3	1,048.9
7	= Gross private domestic investment		3,258.0
8	+ Government investment, structures	NIPA 5.8.5 line 6	277.2
9	+ Government investment, equipment and software	NIPA 5.8.5 line 46	156.5
10	= Gross domestic investment		3,691.7
11	+ Net lending or borrowing on rest of world account	NIPA 4.1 line 30	-798.0
12	+ Capital accounts transaction (net)	NIPA 4.1 line 32	3.9
13	= Gross investment		2,897.6

Line	Saving	Source	Total
1	+ Net saving (NIPA)	NIPA 5.1 line 26	251.8
2	Personal saving	NIPA 2.1 line 33	38.8
3	Undistributed corporate profits with IVA and capital consumption adjustments	NIPA 5.1 line 5	400.9
4	Wage accruals less disbursements (private)	NIPA 5.1 line 9	7.5
5	Net government saving	NIPA 5.1 line 27	-195.4
6	+ Consumption of fixed capital	NIPA 1.7.5 line 5	1,615.2
7	= Gross saving (NIPA)	NIPA 5.1 line 1	1,867.0
8	+ Personal consumption expenditures, durable goods	NIPA 1.1.5 line 3	1,048.9
9	= Gross saving		2,915.9
10	+ Statistical discrepancy	NIPA 5.1 line 26	-18.1
11	= Gross saving and statistical discrepancy		2,897.8
12	- Depreciation	our imputation	2,385.4
13	= Net saving		512.4
14	+ Revaluation	our imputation	4,809.1
15	= Change in wealth		5,321.5

Table 8: Domestic Capital Account, Investment, 1948-2006

*(Billions of Cur*abor Income, 1948-2006

Year	Gross Investment	Private Investment	Government Investment	Balance on Current Account
1948	81.2	71.7	7.1	2.4
1949	73.4	62.7	9.8	0.9
1950	93.8	85.7	9.9	-1.8
1951	109.2	90.8	17.5	0.9
1952	106.8	83.9	22.3	0.6
1953	112.4	89.7	24.0	-1.3
1954	108.5	85.8	22.5	0.2
1955	129.1	107.7	21.0	0.4
1956	135.5	109.7	23.0	2.8
1957	140.2	111.0	24.4	4.8
1958	128.9	101.5	26.5	0.9
1959	149.2	121.1	29.3	-1.2
1960	153.7	122.3	28.2	3.2
1961	155.8	120.0	31.5	4.3
1962	172.1	135.0	33.2	3.9
1963	183.9	145.3	33.6	5.0
1964	200.8	158.7	34.6	7.5
1965	223.1	181.4	35.5	6.2
1966	243.2	199.5	39.8	3.9
1967	245.5	199.0	42.9	3.6
1968	267.3	222.1	43.5	1.7
1969	287.5	242.4	43.3	1.8
1970	285.0	237.3	43.7	4.0
1971	317.5	275.1	41.8	0.6
1972	357.0	318.0	42.6	-3.6
1973	424.1	368.0	46.8	9.3
1974	434.6	371.7	56.3	6.6
1975	448.3	363.8	63.1	21.4
1976	526.3	451.0	66.4	8.9
1977	601.1	542.5	67.6	-9.0
1978	706.3	639.7	77.0	-10.4
1979	797.2	707.3	88.5	1.4
1980	805.4	693.7	100.3	11.4
1981	916.7	803.6	106.8	6.3
1982	869.7	757.5	112.4	-0.2
1983	935.8	845.0	122.8	-32.0
1984	1,114.6	1,062.2	139.3	-86.9
1985	1,147.7	1,099.7	158.8	-110.8
1986	1,183.4	1,149.4	173.2	-139.2
1987	1,240.2	1,206.7	184.3	-150.8
1988	1,349.1	1,275.2	186.1	-112.2
1989	1,456.2	1,346.8	197.7	-88.3
1990	1,480.9	1,335.2	215.7	-70.0
1991	1,490.7	1,256.8	220.4	13.5
1992	1,534.5	1,348.4	223.0	-36.9
1993	1,628.7	1,480.1	219.0	-70.4
1994	1,795.5	1,679.4	221.3	-105.2
1995	1,897.3	1,755.6	232.7	-91.0
1996	2,037.4	1,892.8	244.9	-100.3
1997	2,224.2	2,082.4	252.1	-110.3
1998	2,334.4	2,259.4	262.4	-187.4
1999	2,456.2	2,443.2	286.9	-273.9
2000	2,506.5	2,598.7	304.4	-396.6
2001	2,451.7	2,498.1	324.0	-370.4
2002	2,391.9	2,506.0	344.2	-458.3
2003	2,450.4	2,606.7	356.0	-512.3
2004	2,620.9	2,872.3	372.7	-624.1
2005	2,763.9	3,101.1	397.8	-735.0
2006	2,897.7	3,258.0	433.8	-794.1

Table 9: Domestic Capital Account, Change in Wealth, 1948-2006

(Billions of Cur)**or Income, 1948-2006**

Year	Gross Saving	Depreciation	Net Saving	Revaluation	Change in Wealth
1948	81.2	36.5	44.7		
1949	73.4	40.5	32.9	-1.2	31.7
1950	93.8	44.1	49.7	7.0	56.7
1951	109.2	51.1	58.1	114.8	172.9
1952	106.8	54.8	52.0	18.4	70.4
1953	112.4	58.8	53.6	15.4	69.0
1954	108.5	62.4	46.1	21.3	67.4
1955	129.1	65.9	63.2	24.9	88.0
1956	135.5	72.7	62.8	93.3	156.1
1957	140.2	78.7	61.5	52.2	113.7
1958	128.9	81.8	47.1	49.2	96.3
1959	149.2	86.2	63.0	39.5	102.5
1960	153.7	89.4	64.3	53.2	117.6
1961	155.8	92.1	63.7	44.5	108.2
1962	172.1	95.4	76.7	58.8	135.4
1963	183.9	99.7	84.2	33.9	118.0
1964	200.8	104.9	95.9	5.1	101.0
1965	223.1	110.9	112.2	36.4	148.6
1966	243.2	118.9	124.3	85.2	209.6
1967	245.5	129.8	115.7	73.0	188.7
1968	267.3	142.6	124.7	173.1	297.8
1969	287.5	156.9	130.6	222.7	353.3
1970	285.0	172.5	112.5	183.3	295.8
1971	317.5	187.3	130.2	204.0	334.2
1972	357.0	205.3	151.7	439.5	591.2
1973	424.1	222.8	201.3	397.1	598.4
1974	434.6	255.8	178.8	508.7	687.5
1975	448.3	294.2	154.1	468.0	622.1
1976	526.3	320.2	206.1	369.5	575.6
1977	601.1	353.9	247.2	747.4	994.6
1978	706.3	398.5	307.8	890.4	1,198.2
1979	797.2	455.0	342.2	1,192.7	1,534.8
1980	805.4	522.1	283.3	1,163.0	1,446.4
1981	916.7	585.1	331.6	1,426.0	1,757.6
1982	869.7	635.9	233.8	611.8	845.6
1983	935.8	660.5	275.3	420.4	695.8
1984	1,114.6	694.4	420.2	990.8	1,411.1
1985	1,147.7	744.0	403.7	1,165.4	1,569.1
1986	1,183.4	803.6	379.8	830.4	1,210.2
1987	1,240.2	867.7	372.5	1,107.0	1,479.5
1988	1,349.1	929.9	419.2	1,268.5	1,687.7
1989	1,456.2	995.9	460.3	1,198.6	1,658.9
1990	1,480.9	1,057.7	423.1	236.8	660.0
1991	1,490.7	1,112.4	378.3	69.2	447.5
1992	1,534.5	1,141.3	393.2	109.0	502.2
1993	1,628.7	1,190.5	438.2	612.9	1,051.1
1994	1,795.5	1,257.3	538.2	437.9	976.1
1995	1,897.3	1,334.1	563.2	771.9	1,335.1
1996	2,037.4	1,396.0	641.4	655.3	1,296.7
1997	2,224.2	1,459.3	764.9	452.8	1,217.7
1998	2,334.4	1,528.5	805.9	1,293.0	2,098.9
1999	2,456.2	1,621.4	834.8	1,816.3	2,651.1
2000	2,506.5	1,743.7	762.8	2,037.4	2,800.3
2001	2,451.7	1,860.4	591.3	1,340.8	1,932.1
2002	2,391.9	1,936.3	455.6	2,560.5	3,016.1
2003	2,450.4	1,999.6	450.8	3,051.6	3,502.5
2004	2,620.9	2,100.4	520.5	3,857.6	4,378.1
2005	2,763.9	2,240.1	523.8	6,010.2	6,534.1
2006	2,897.7	2,385.4	512.3	4,809.1	5,321.4

Table 10: Foreign Transactions Capital Account, 2006

Line		Balance on Current Account	Source	Total
1		Balance on current account	NIPA 4.1 line 29	-794.1

Line		Capital Account Transactions and Net Lending	Source	Total
1		Capital account transactions (net)	NIPA 4.1 line 32	3.9
2		Net lending or borrowing	NIPA 4.1 line 30	-798.0
3	=	Current account transactions and net lending		-794.1

Table 11: Foreign Transactions Capital Account, 1948-2006

(Billions of **Labor Income, 1948-2006**

Year	Balance on Current Account	Capital Account Transactions (net)	Net lending or borrowing
1948	2.4	.....	2.4
1949	0.9	.....	0.9
1950	-1.8	.....	-1.8
1951	0.9	.....	0.9
1952	0.6	.....	0.6
1953	-1.3	.....	-1.3
1954	0.2	.....	0.2
1955	0.4	.....	0.4
1956	2.8	.....	2.8
1957	4.8	.....	4.8
1958	0.9	.....	0.9
1959	-1.2	.....	-1.2
1960	3.2	.....	3.2
1961	4.3	.....	4.3
1962	3.9	.....	3.9
1963	5.0	.....	5.0
1964	7.5	.....	7.5
1965	6.2	.....	6.2
1966	3.9	.....	3.9
1967	3.6	.....	3.6
1968	1.7	.....	1.7
1969	1.8	.....	1.8
1970	4.0	.....	4.0
1971	0.6	.....	0.6
1972	-3.6	.....	-3.6
1973	9.3	.....	9.3
1974	6.6	.....	6.6
1975	21.4	.....	21.4
1976	8.9	.....	8.9
1977	-9.0	.....	-9.0
1978	-10.4	.....	-10.4
1979	1.4	.....	1.4
1980	11.4	.....	11.4
1981	6.3	.....	6.3
1982	-0.2	-0.2	0.0
1983	-32.1	-0.2	-31.8
1984	-86.9	-0.2	-86.7
1985	-110.8	-0.3	-110.5
1986	-139.2	-0.3	-138.9
1987	-150.8	-0.4	-150.4
1988	-112.2	-0.5	-111.7
1989	-88.3	-0.3	-88.0
1990	-70.1	6.6	-76.6
1991	13.5	4.5	9.0
1992	-36.9	0.6	-37.5
1993	-70.4	1.3	-71.7
1994	-105.2	1.7	-106.9
1995	-91.0	0.9	-91.9
1996	-100.3	0.7	-101.0
1997	-110.2	1.0	-111.3
1998	-187.4	0.7	-188.1
1999	-273.9	4.8	-278.7
2000	-396.6	0.8	-397.4
2001	-370.4	1.1	-371.5
2002	-458.3	1.4	-459.7
2003	-512.3	3.2	-515.5
2004	-624.1	2.4	-626.5
2005	-735.1	4.1	-739.1
2006	-794.1	3.9	-798.0

Table 12: Wealth Account, 2006

Line		Wealth	Source	Total
1	+	Private domestic tangible assets	our imputation	53,333.8
2	+	Government tangible assets	our imputation	13,581.9
3	=	Domestic tangible assets		66,915.7
4	+	Net international investment position of the United States		-2,199.4
5	=	Wealth		64,716.2

Table 13: Wealth Account, 1948-2006

*(Billions o)***or Income, 1948-2006**

Year	Wealth	Private domestic tangible assets	Government tangible assets	Net international investment position of the United States
1948	819.2	544.3	262.0	12.9
1949	850.9	574.4	262.7	13.8
1950	907.6	636.1	258.4	13.1
1951	1,080.6	771.0	295.6	14.0
1952	1,151.0	821.2	315.5	14.2
1953	1,220.0	872.7	331.9	15.4
1954	1,287.4	929.5	343.1	14.8
1955	1,375.4	1,000.5	360.3	14.7
1956	1,531.6	1,108.1	406.2	17.3
1957	1,645.3	1,181.0	442.3	22.0
1958	1,741.6	1,255.5	462.7	23.3
1959	1,844.1	1,334.4	487.0	22.7
1960	1,960.6	1,422.5	511.4	26.7
1961	2,067.8	1,504.2	535.5	28.1
1962	2,202.1	1,603.1	564.9	34.1
1963	2,319.8	1,687.2	595.8	36.8
1964	2,419.9	1,751.8	625.8	42.2
1965	2,568.1	1,864.4	656.2	47.4
1966	2,778.3	2,026.4	700.5	51.4
1967	2,966.3	2,164.6	751.5	50.2
1968	3,264.5	2,410.0	806.7	47.8
1969	3,616.3	2,681.5	887.1	47.7
1970	3,911.9	2,888.7	983.8	39.3
1971	4,236.3	3,142.4	1,068.0	26.0
1972	4,825.6	3,612.0	1,192.2	21.4
1973	5,421.3	4,062.7	1,309.3	49.3
1974	6,106.3	4,484.1	1,548.5	73.7
1975	6,732.8	4,914.7	1,728.9	89.2
1976	7,317.3	5,400.7	1,838.3	78.2
1977	8,307.8	6,157.2	1,996.8	153.8
1978	9,515.2	7,111.4	2,191.8	212.0
1979	11,074.4	8,271.2	2,469.8	333.3
1980	12,541.6	9,317.5	2,845.6	378.6
1981	14,321.0	10,776.9	3,244.0	300.1
1982	15,202.5	11,520.5	3,446.0	235.9
1983	15,914.4	12,103.8	3,553.2	257.4
1984	17,342.2	13,513.8	3,694.3	134.1
1985	18,927.8	15,049.0	3,781.9	96.9
1986	20,166.5	16,018.4	4,047.3	100.8
1987	21,637.0	17,233.2	4,353.2	50.5
1988	23,305.4	18,668.0	4,626.9	10.5
1989	25,013.9	20,129.3	4,931.5	-47.0
1990	25,698.9	20,725.0	5,138.5	-164.5
1991	26,100.7	21,062.7	5,298.8	-260.8
1992	26,555.2	21,541.6	5,465.9	-452.3
1993	27,608.1	22,097.6	5,654.7	-144.3
1994	28,576.9	22,787.7	5,924.4	-135.3
1995	29,936.1	24,043.2	6,198.7	-305.8
1996	31,220.7	25,080.9	6,499.8	-360.0
1997	32,359.0	26,388.8	6,792.9	-822.7
1998	34,602.9	28,471.0	7,202.7	-1,070.8
1999	37,322.9	30,674.8	7,685.5	-1,037.4
2000	40,053.7	33,336.3	8,298.4	-1,581.0
2001	41,976.2	35,486.5	8,829.1	-2,339.4
2002	44,968.6	37,926.8	9,496.1	-2,454.3
2003	48,433.3	40,641.8	10,131.1	-2,339.6
2004	52,897.1	44,257.7	11,036.2	-2,396.7
2005	59,412.7	49,219.5	12,392.2	-2,199.0
2006	64,716.2	53,333.8	13,581.9	-2,199.4

Table 14: U.S. International Position, 2006

Line		Wealth	Source	Total
1	+	U.S. owned assets abroad		14,039.6
2	-	Foreign-owned assets in the United States		16,239.0
3	=	Net international investment position of the United States		-2,199.4

Table 15: U.S. International Position, 1948-2006

(Billions o) Labor Income, 1948-2006

Year	U.S. owned assets abroad	Foreign-owned assets in the United States	Net international investment position of the United States
1948	29.4	16.5	12.9
1949	30.7	16.9	13.8
1950	32.8	19.7	13.1
1951	34.8	20.9	14.0
1952	37.2	23.0	14.2
1953	39.5	24.1	15.4
1954	42.2	27.4	14.8
1955	45.0	30.4	14.7
1956	49.8	32.5	17.3
1957	54.3	32.4	22.0
1958	59.4	36.1	23.3
1959	64.8	42.1	22.7
1960	71.4	44.7	26.7
1961	75.0	46.9	28.1
1962	80.3	46.3	34.1
1963	88.3	51.5	36.8
1964	99.1	56.9	42.2
1965	106.2	58.7	47.4
1966	111.8	60.4	51.4
1967	119.9	69.7	50.2
1968	131.1	83.2	47.8
1969	138.5	90.8	47.7
1970	136.7	97.4	39.3
1971	151.9	125.9	26.0
1972	181.0	159.6	21.4
1973	232.0	182.7	49.3
1974	276.9	203.2	73.7
1975	321.3	232.1	89.2
1976	343.4	265.2	78.2
1977	488.4	334.6	153.8
1978	645.9	434.0	212.0
1979	844.8	511.5	333.3
1980	1,003.8	625.2	378.6
1981	944.7	644.6	300.1
1982	961.0	725.1	235.9
1983	1,129.7	872.3	257.4
1984	1,127.1	993.0	134.1
1985	1,302.7	1,205.8	96.9
1986	1,594.7	1,493.9	100.8
1987	1,758.7	1,708.2	50.5
1988	2,008.4	1,997.9	10.5
1989	2,350.2	2,397.2	-47.0
1990	2,294.1	2,458.6	-164.5
1991	2,470.6	2,731.4	-260.8
1992	2,466.5	2,918.8	-452.3
1993	3,091.4	3,235.7	-144.3
1994	3,315.1	3,450.4	-135.3
1995	3,964.6	4,270.4	-305.8
1996	4,650.8	5,010.9	-360.0
1997	5,379.1	6,201.9	-822.7
1998	6,179.1	7,249.9	-1,070.8
1999	7,399.7	8,437.1	-1,037.4
2000	7,401.2	8,982.2	-1,581.0
2001	6,930.5	9,269.9	-2,339.4
2002	6,807.8	9,262.1	-2,454.3
2003	8,318.2	10,657.7	-2,339.6
2004	10,129.9	12,526.6	-2,396.7
2005	11,421.4	13,620.4	-2,199.0
2006	14,039.6	16,239.0	-2,199.4

Table 16: Domestic Income and Product Account, Product, 1948-2006

*(Constant pric*r Income, 1948-2006

Year	Gross Domestic Product		Investment Goods Product		Consumption Goods Product	
	Price	Quantity	Price	Quantity	Price	Quantity
1948	0.171	1,691.1	0.256	307.8	0.151	1,394.0
1949	0.164	1,731.5	0.253	285.0	0.143	1,479.7
1950	0.168	1,887.1	0.255	362.6	0.148	1,521.5
1951	0.179	2,046.4	0.282	377.1	0.154	1,678.5
1952	0.179	2,148.2	0.284	365.6	0.154	1,817.6
1953	0.180	2,251.3	0.283	391.4	0.156	1,889.9
1954	0.184	2,244.8	0.283	378.4	0.161	1,905.5
1955	0.186	2,392.3	0.287	442.4	0.162	1,961.6
1956	0.193	2,445.3	0.304	434.2	0.167	2,037.3
1957	0.195	2,500.5	0.314	429.4	0.168	2,110.2
1958	0.205	2,494.0	0.318	398.2	0.178	2,159.9
1959	0.204	2,647.7	0.317	457.2	0.177	2,231.2
1960	0.212	2,709.2	0.321	463.1	0.186	2,291.3
1961	0.211	2,778.0	0.322	467.2	0.185	2,362.9
1962	0.213	2,927.6	0.322	514.2	0.187	2,452.1
1963	0.216	3,041.4	0.323	545.8	0.190	2,527.6
1964	0.222	3,208.7	0.325	587.4	0.197	2,647.4
1965	0.229	3,396.9	0.328	648.1	0.204	2,759.9
1966	0.238	3,620.5	0.336	699.2	0.215	2,928.2
1967	0.242	3,717.4	0.342	691.6	0.217	3,047.9
1968	0.253	3,884.2	0.356	721.5	0.228	3,186.3
1969	0.266	4,004.6	0.372	744.1	0.240	3,284.7
1970	0.273	4,021.6	0.389	701.8	0.245	3,370.0
1971	0.289	4,154.0	0.405	749.1	0.260	3,442.9
1972	0.311	4,366.7	0.419	820.3	0.284	3,569.4
1973	0.332	4,608.4	0.436	912.8	0.306	3,698.6
1974	0.358	4,600.0	0.477	871.6	0.329	3,748.6
1975	0.388	4,605.1	0.537	795.8	0.352	3,867.0
1976	0.416	4,851.9	0.563	903.7	0.380	3,976.2
1977	0.447	5,087.9	0.594	994.2	0.410	4,101.3
1978	0.479	5,355.8	0.633	1,086.2	0.441	4,260.1
1979	0.510	5,511.7	0.691	1,120.9	0.465	4,379.5
1980	0.548	5,485.1	0.756	1,038.6	0.496	4,474.2
1981	0.600	5,594.6	0.825	1,073.1	0.545	4,542.6
1982	0.636	5,501.2	0.870	962.2	0.578	4,607.3
1983	0.672	5,733.3	0.869	1,040.9	0.621	4,746.3
1984	0.708	6,134.8	0.878	1,245.4	0.664	4,899.7
1985	0.721	6,398.7	0.888	1,284.6	0.677	5,129.4
1986	0.724	6,653.6	0.888	1,324.8	0.681	5,348.1
1987	0.741	6,897.9	0.901	1,378.2	0.699	5,538.3
1988	0.776	7,165.9	0.915	1,442.4	0.738	5,739.9
1989	0.803	7,412.1	0.940	1,504.3	0.767	5,921.9
1990	0.822	7,565.2	0.958	1,499.8	0.785	6,087.7
1991	0.850	7,550.3	0.972	1,417.3	0.817	6,171.7
1992	0.872	7,784.3	0.970	1,498.4	0.844	6,319.4
1993	0.886	7,998.5	0.981	1,581.2	0.859	6,445.8
1994	0.903	8,313.7	0.992	1,719.0	0.877	6,613.9
1995	0.923	8,542.4	1.001	1,780.3	0.900	6,780.1
1996	0.941	8,877.0	1.005	1,923.6	0.922	6,964.6
1997	0.961	9,292.7	1.004	2,124.6	0.948	7,171.6
1998	0.970	9,710.1	0.995	2,277.9	0.962	7,433.2
1999	0.983	10,164.8	0.993	2,425.5	0.979	7,739.4
2000	1.000	10,569.0	1.000	2,528.6	1.000	8,040.4
2001	1.026	10,705.9	1.010	2,452.4	1.030	8,252.4
2002	1.034	10,943.6	1.010	2,423.1	1.041	8,517.4
2003	1.063	11,286.1	1.010	2,514.5	1.078	8,769.0
2004	1.078	11,704.2	1.029	2,665.6	1.092	9,039.4
2005	1.101	12,111.2	1.066	2,796.1	1.112	9,317.8
2006	1.127	12,483.1	1.092	2,867.5	1.137	9,617.9

Table 17: Domestic Income and Product Account, Labor Income, 1948-2006

(Constant prices of 2000)

Year	Labor Income				Employment	Weekly Hours	Hourly Compensation	Hours Worked
	Price	Quantity	Value	Quality				
1948	0.077	2,245.7	173.2	0.734	61,536	38.9	1.4	124,616
1949	0.080	2,184.2	173.6	0.734	60,437	38.6	1.4	121,201
1950	0.082	2,276.8	187.0	0.746	62,424	38.3	1.5	124,336
1951	0.087	2,465.4	213.6	0.762	66,169	38.3	1.6	131,846
1952	0.090	2,537.5	228.7	0.776	67,407	38.0	1.7	133,284
1953	0.094	2,600.2	244.4	0.789	68,471	37.7	1.8	134,352
1954	0.096	2,539.3	244.5	0.796	66,843	37.4	1.9	130,070
1955	0.100	2,616.4	262.7	0.799	68,367	37.6	2.0	133,520
1956	0.106	2,680.4	283.6	0.805	69,968	37.3	2.1	135,779
1957	0.111	2,686.9	297.5	0.812	70,262	36.9	2.2	134,783
1958	0.114	2,621.0	299.3	0.818	68,578	36.6	2.3	130,526
1959	0.119	2,711.8	323.5	0.823	70,149	36.8	2.4	134,240
1960	0.123	2,750.5	339.5	0.828	71,128	36.6	2.5	135,346
1961	0.126	2,771.0	348.7	0.837	71,183	36.4	2.6	134,905
1962	0.130	2,862.6	371.3	0.846	72,673	36.5	2.7	137,903
1963	0.133	2,919.7	388.9	0.856	73,413	36.4	2.8	139,032
1964	0.139	3,003.8	416.2	0.864	74,990	36.3	2.9	141,729
1965	0.144	3,097.2	446.6	0.863	77,239	36.4	3.1	146,304
1966	0.151	3,238.5	490.3	0.869	80,802	36.2	3.2	151,932
1967	0.159	3,285.3	522.6	0.874	82,645	35.7	3.4	153,260
1968	0.171	3,359.4	575.2	0.877	84,733	35.4	3.7	156,187
1969	0.183	3,446.8	632.1	0.878	87,071	35.4	3.9	160,067
1970	0.199	3,386.9	673.1	0.879	86,867	34.8	4.3	157,112
1971	0.212	3,391.7	719.0	0.884	86,715	34.7	4.6	156,454
1972	0.227	3,482.9	789.3	0.885	88,838	34.7	4.9	160,480
1973	0.243	3,627.2	880.9	0.886	92,542	34.7	5.3	166,760
1974	0.266	3,638.0	966.1	0.888	94,121	34.1	5.8	166,881
1975	0.287	3,589.3	1,029.5	0.900	92,575	33.8	6.3	162,482
1976	0.311	3,691.7	1,147.5	0.902	94,922	33.8	6.9	166,754
1977	0.335	3,820.9	1,279.4	0.903	98,202	33.8	7.4	172,399
1978	0.362	3,997.3	1,448.6	0.903	102,931	33.7	8.0	180,360
1979	0.394	4,136.6	1,628.4	0.905	106,463	33.6	8.7	186,235
1980	0.435	4,116.4	1,792.6	0.907	107,061	33.2	9.7	184,922
1981	0.476	4,161.5	1,980.5	0.914	108,050	33.0	10.7	185,539
1982	0.508	4,112.3	2,090.2	0.920	106,749	32.8	11.5	182,161
1983	0.530	4,184.8	2,219.2	0.923	107,810	33.0	12.0	184,781
1984	0.554	4,420.9	2,447.9	0.930	112,604	33.1	12.6	193,754
1985	0.580	4,529.0	2,626.0	0.932	115,201	33.1	13.3	198,072
1986	0.608	4,581.7	2,785.0	0.933	117,158	32.9	13.9	200,164
1987	0.628	4,746.3	2,978.8	0.939	120,456	32.9	14.5	206,046
1988	0.656	4,897.4	3,214.1	0.944	123,916	32.8	15.2	211,493
1989	0.674	5,050.1	3,402.5	0.948	126,743	33.0	15.7	217,179
1990	0.705	5,145.1	3,625.1	0.956	128,290	32.9	16.5	219,439
1991	0.736	5,089.6	3,747.4	0.964	127,022	32.6	17.4	215,069
1992	0.774	5,098.4	3,943.7	0.966	127,100	32.5	18.3	215,004
1993	0.786	5,250.6	4,129.1	0.974	129,556	32.6	18.8	219,627
1994	0.802	5,423.0	4,346.7	0.979	132,459	32.8	19.3	225,693
1995	0.817	5,571.2	4,550.9	0.984	135,297	32.8	19.7	230,698
1996	0.842	5,658.7	4,764.6	0.987	137,571	32.7	20.4	233,618
1997	0.867	5,824.9	5,051.9	0.989	140,432	32.9	21.0	240,001
1998	0.903	6,005.1	5,423.7	0.997	143,557	32.9	22.1	245,466
1999	0.943	6,124.6	5,776.1	0.997	146,468	32.9	23.1	250,349
2000	1.000	6,220.7	6,220.7	1.000	149,364	32.6	24.5	253,525
2001	1.034	6,171.0	6,383.3	1.003	149,166	32.3	25.5	250,757
2002	1.061	6,158.0	6,532.0	1.013	147,895	32.2	26.4	247,790
2003	1.098	6,191.4	6,796.0	1.023	147,909	32.1	27.5	246,729
2004	1.137	6,286.3	7,149.7	1.027	149,565	32.1	28.7	249,547
2005	1.180	6,393.0	7,545.9	1.029	151,046	32.2	29.8	253,298
2006	1.203	6,635.8	7,980.3	1.033	154,055	32.7	30.5	261,912

Table 18: Benchmarks, Depreciation Rates, and Deflators

Line	Asset Class	2006 Benchmark (billions of 2000 dollars)	Depreciation Rate	Deflator
1	Consumer Durables	4,806.6	0.201	NIPA
2	Nonresidential Structures	12,221.3	0.026	NIPA
3	Residential Structures	12,181.4	0.016	NIPA
4	Equipment and Software	6,488.6	0.145	NIPA
5	Nonfarm inventories	1,716.4	-	NIPA
6	Farm inventories	125.7	-	NIPA
7	Land	10,119.8	-	Implicit price of household land, Flow of Funds

Table 19: Relative Proportions of Capital Stock by Asset Class and Sector, 2006

Line	Asset Class	Sector				Total
		Corporate	Noncorporate	Households	Government	
1	Consumer durables	-	-	0.066	-	0.066
2	Nonresidential structures	0.101	0.025	0.017	0.111	0.253
3	Equipment and software	0.070	0.010	0.003	0.015	0.098
4	Residential structures	0.002	0.039	0.202	0.004	0.248
5	Nonfarm inventories	0.024	0.002	-	0.005	0.031
6	Farm inventories	-	0.003	-	-	0.003
7	Land	0.056	0.079	0.100	0.067	0.302
	Total	0.253	0.157	0.386	0.203	1.000

Table 20: Domestic Income and Product Account, Capital Income, 1948-2006

(Constant **ncome, 1948-2006**

	Capital Income		Corporate Income		Noncorporate Income		Household Income		Government Income		Capital Income
Year	Price	Quantity	Price	Quantity	Price	Quantity	Price	Quantity	Price	Quantity	Relative Share
1948	0.225	509.2	0.302	145.1	0.136	156.9	0.294	119.8	0.095	151.3	0.397
1949	0.198	550.7	0.279	154.5	0.118	164.6	0.230	141.3	0.098	145.9	0.385
1950	0.220	588.6	0.312	163.6	0.134	172.0	0.235	161.8	0.122	141.8	0.408
1951	0.239	632.0	0.332	174.6	0.175	180.5	0.259	182.7	0.101	141.3	0.414
1952	0.232	669.4	0.308	185.6	0.173	185.6	0.256	198.4	0.106	144.7	0.404
1953	0.230	700.2	0.305	193.3	0.165	189.9	0.234	212.1	0.141	150.4	0.397
1954	0.232	730.1	0.295	200.5	0.156	194.0	0.255	225.3	0.147	156.1	0.410
1955	0.238	764.5	0.339	209.9	0.154	198.6	0.256	240.7	0.120	160.0	0.410
1956	0.236	802.2	0.329	220.7	0.134	203.0	0.274	257.4	0.120	162.3	0.401
1957	0.229	834.1	0.325	230.3	0.150	206.4	0.243	271.4	0.115	163.6	0.390
1958	0.248	857.3	0.304	235.7	0.167	210.6	0.269	282.7	0.182	165.6	0.416
1959	0.245	883.5	0.345	242.2	0.154	215.6	0.241	294.0	0.171	169.4	0.401
1960	0.257	916.0	0.331	252.2	0.144	220.7	0.280	306.4	0.200	173.7	0.410
1961	0.251	945.0	0.330	261.7	0.157	225.1	0.276	316.3	0.159	178.2	0.405
1962	0.260	977.0	0.353	272.4	0.167	230.8	0.276	326.6	0.159	182.9	0.406
1963	0.263	1,016.8	0.362	285.5	0.170	238.5	0.277	340.3	0.158	187.1	0.408
1964	0.278	1,060.7	0.377	300.0	0.182	246.0	0.286	356.5	0.183	190.7	0.415
1965	0.296	1,112.6	0.401	318.1	0.196	254.8	0.308	375.7	0.190	193.6	0.425
1966	0.317	1,177.8	0.403	342.5	0.230	265.3	0.334	398.6	0.208	196.5	0.432
1967	0.303	1,241.6	0.388	365.3	0.228	277.0	0.309	420.9	0.207	201.0	0.419
1968	0.313	1,302.5	0.397	385.3	0.230	288.7	0.320	444.0	0.224	205.4	0.415
1969	0.316	1,367.3	0.390	408.3	0.227	299.5	0.348	469.0	0.200	207.6	0.406
1970	0.299	1,423.0	0.364	428.7	0.244	310.0	0.330	489.1	0.152	208.8	0.387
1971	0.325	1,476.2	0.393	446.7	0.270	321.8	0.363	508.8	0.159	208.2	0.400
1972	0.368	1,543.7	0.417	468.7	0.291	336.3	0.395	536.4	0.300	207.9	0.418
1973	0.400	1,620.2	0.432	495.5	0.334	351.5	0.415	569.7	0.391	207.2	0.424
1974	0.405	1,684.5	0.429	522.9	0.334	361.7	0.406	596.7	0.458	206.1	0.414
1975	0.438	1,731.3	0.492	543.8	0.375	366.9	0.402	614.7	0.509	208.2	0.424
1976	0.488	1,784.0	0.534	563.4	0.420	371.5	0.434	638.2	0.641	212.9	0.432
1977	0.536	1,854.1	0.587	591.2	0.439	379.2	0.499	670.7	0.677	215.7	0.437
1978	0.575	1,938.2	0.627	627.0	0.481	390.5	0.535	705.9	0.719	218.1	0.435
1979	0.584	2,025.0	0.631	666.4	0.547	404.7	0.550	737.4	0.618	219.8	0.421
1980	0.578	2,095.4	0.635	701.4	0.521	416.2	0.576	757.6	0.506	222.0	0.403
1981	0.639	2,158.3	0.722	735.1	0.535	428.2	0.621	770.0	0.630	224.8	0.411
1982	0.636	2,213.5	0.721	765.4	0.461	437.0	0.648	781.3	0.657	227.6	0.403
1983	0.718	2,272.4	0.774	794.4	0.585	442.3	0.658	800.5	1.005	231.1	0.424
1984	0.803	2,363.4	0.848	835.6	0.636	452.0	0.732	835.8	1.229	235.8	0.437
1985	0.804	2,474.8	0.846	881.7	0.688	465.4	0.749	882.0	1.083	242.3	0.431
1986	0.786	2,584.2	0.822	918.9	0.763	476.6	0.754	933.8	0.830	251.5	0.422
1987	0.793	2,686.7	0.854	951.3	0.730	485.0	0.760	984.6	0.824	262.5	0.417
1988	0.841	2,785.5	0.907	983.6	0.709	494.1	0.805	1,033.0	0.989	271.1	0.422
1989	0.885	2,882.9	0.921	1,018.2	0.885	504.3	0.825	1,079.4	1.000	277.7	0.429
1990	0.873	2,968.5	0.916	1,051.1	0.915	512.8	0.822	1,117.4	0.853	284.3	0.417
1991	0.881	3,032.8	0.916	1,076.9	0.884	518.4	0.822	1,143.6	0.982	291.0	0.416
1992	0.919	3,095.3	0.927	1,104.9	1.014	522.0	0.836	1,168.6	1.061	297.2	0.419
1993	0.933	3,174.0	0.944	1,142.3	1.088	525.8	0.887	1,202.9	0.806	301.9	0.418
1994	0.965	3,272.3	0.997	1,190.9	1.115	530.8	0.891	1,245.5	0.877	305.1	0.421
1995	0.983	3,389.6	1.032	1,251.6	1.065	536.4	0.947	1,294.1	0.791	307.3	0.423
1996	1.018	3,527.6	1.069	1,322.3	1.124	543.3	0.941	1,351.4	0.959	309.8	0.430
1997	1.051	3,693.8	1.100	1,407.5	1.133	552.7	0.974	1,421.1	1.034	312.1	0.435
1998	1.026	3,893.9	1.056	1,511.1	1.057	564.6	0.987	1,503.8	1.011	314.1	0.424
1999	1.022	4,119.9	1.031	1,625.3	1.079	577.5	1.001	1,599.6	0.982	317.3	0.422
2000	1.000	4,348.7	1.000	1,738.6	1.000	590.0	1.000	1,699.5	1.000	320.6	0.411
2001	1.011	4,544.2	0.951	1,827.8	1.145	599.9	1.006	1,794.4	1.132	324.1	0.419
2002	1.018	4,698.7	0.966	1,879.8	1.207	606.3	0.987	1,889.2	1.133	328.7	0.423
2003	1.073	4,841.8	0.997	1,919.2	1.356	611.7	1.015	1,986.5	1.310	334.1	0.433
2004	1.096	4,988.0	1.081	1,963.0	1.468	617.7	1.020	2,083.3	0.930	339.5	0.433
2005	1.125	5,149.3	1.148	2,019.1	1.627	625.9	0.980	2,182.0	0.923	345.1	0.434
2006	1.145	5,319.5	1.198	2,083.6	1.615	635.2	0.970	2,281.2	1.010	351.2	0.433

Table 21: Domestic Income and Product Account, Productivity, 1948-2006

*(Constant pri***r Income, 1948-2006**

	Gross Domestic Product		Gross Domestic Income		Multifactor
Year	Price	Quantity	Price	Quantity	Productivity
1948	0.171	1,691.1	0.120	2,410.9	0.703
1949	0.164	1,731.5	0.116	2,444.9	0.710
1950	0.168	1,887.1	0.123	2,574.1	0.735
1951	0.179	2,046.4	0.132	2,774.7	0.739
1952	0.179	2,148.2	0.133	2,887.4	0.745
1953	0.180	2,251.3	0.136	2,981.5	0.755
1954	0.184	2,244.8	0.139	2,986.6	0.751
1955	0.186	2,392.3	0.144	3,098.9	0.772
1956	0.193	2,445.3	0.148	3,203.2	0.763
1957	0.195	2,500.5	0.150	3,265.4	0.767
1958	0.205	2,494.0	0.158	3,247.0	0.768
1959	0.204	2,647.7	0.161	3,355.9	0.789
1960	0.212	2,709.2	0.168	3,435.5	0.789
1961	0.211	2,778.0	0.168	3,495.2	0.795
1962	0.213	2,927.6	0.173	3,609.6	0.811
1963	0.216	3,041.4	0.177	3,713.7	0.819
1964	0.222	3,208.7	0.185	3,841.9	0.835
1965	0.229	3,396.9	0.195	3,989.5	0.851
1966	0.238	3,620.5	0.206	4,193.4	0.863
1967	0.242	3,717.4	0.208	4,323.8	0.860
1968	0.253	3,884.2	0.220	4,469.1	0.869
1969	0.266	4,004.6	0.230	4,627.7	0.865
1970	0.273	4,021.6	0.236	4,654.4	0.864
1971	0.289	4,154.0	0.254	4,725.2	0.879
1972	0.311	4,366.7	0.278	4,888.4	0.893
1973	0.332	4,608.4	0.300	5,107.0	0.902
1974	0.358	4,600.0	0.317	5,200.5	0.885
1975	0.388	4,605.1	0.343	5,219.5	0.882
1976	0.416	4,851.9	0.376	5,372.4	0.903
1977	0.447	5,087.9	0.408	5,570.0	0.913
1978	0.479	5,355.8	0.440	5,826.2	0.919
1979	0.510	5,511.7	0.465	6,052.9	0.911
1980	0.548	5,485.1	0.491	6,122.0	0.896
1981	0.600	5,594.6	0.539	6,235.3	0.897
1982	0.636	5,501.2	0.559	6,256.3	0.879
1983	0.672	5,733.3	0.603	6,389.2	0.897
1984	0.708	6,134.8	0.648	6,704.4	0.915
1985	0.721	6,398.7	0.666	6,934.3	0.923
1986	0.724	6,653.6	0.677	7,109.7	0.936
1987	0.741	6,897.9	0.693	7,377.1	0.935
1988	0.776	7,165.9	0.729	7,627.1	0.940
1989	0.803	7,412.1	0.756	7,876.7	0.941
1990	0.822	7,565.2	0.771	8,061.1	0.938
1991	0.850	7,550.3	0.794	8,082.6	0.934
1992	0.872	7,784.3	0.832	8,159.9	0.954
1993	0.886	7,998.5	0.845	8,388.2	0.954
1994	0.903	8,313.7	0.867	8,657.1	0.960
1995	0.923	8,542.4	0.883	8,924.6	0.957
1996	0.941	8,877.0	0.912	9,158.9	0.969
1997	0.961	9,292.7	0.941	9,498.2	0.978
1998	0.970	9,710.1	0.953	9,886.6	0.982
1999	0.983	10,164.8	0.975	10,240.6	0.993
2000	1.000	10,569.0	1.000	10,569.0	1.000
2001	1.026	10,705.9	1.025	10,713.8	0.999
2002	1.034	10,943.6	1.043	10,852.1	1.008
2003	1.063	11,286.1	1.088	11,026.5	1.024
2004	1.078	11,704.2	1.120	11,265.9	1.039
2005	1.101	12,111.2	1.157	11,532.2	1.050
2006	1.127	12,483.1	1.178	11,945.5	1.045

Table 22: Income and Expenditures Account, Expenditure, 1948-2006

(Constant **Income, 1948-2006**

	Net Expenditures		Personal Consumption Expenditures		Government Consumption Expenditures		Net Saving		Effective Tax Rate on Consumption
Year	Price	Quantity	Price	Quantity	Price	Quantity	Price	Quantity	Expenditures
1948	0.158	1,656.1	0.172	1,035.5	0.096	398.9	0.267	167.7	0.046
1949	0.152	1,654.6	0.162	1,082.8	0.099	429.3	0.261	125.9	0.048
1950	0.153	1,862.6	0.165	1,143.2	0.108	428.4	0.231	214.9	0.046
1951	0.166	1,975.9	0.177	1,201.5	0.105	535.0	0.287	202.2	0.043
1952	0.168	2,051.3	0.179	1,258.5	0.107	626.8	0.294	177.1	0.046
1953	0.173	2,106.7	0.178	1,309.4	0.118	656.2	0.320	167.5	0.048
1954	0.175	2,099.5	0.183	1,348.2	0.122	616.0	0.295	156.3	0.045
1955	0.176	2,254.6	0.184	1,419.0	0.119	610.3	0.307	205.9	0.045
1956	0.183	2,297.4	0.190	1,484.4	0.122	613.3	0.330	190.4	0.044
1957	0.184	2,345.0	0.189	1,529.4	0.125	645.4	0.343	179.2	0.045
1958	0.200	2,256.0	0.197	1,565.2	0.148	647.9	0.411	114.7	0.046
1959	0.192	2,471.5	0.194	1,632.7	0.144	662.0	0.335	187.7	0.049
1960	0.203	2,511.2	0.204	1,679.0	0.154	669.4	0.356	180.6	0.051
1961	0.202	2,571.1	0.206	1,725.2	0.146	691.9	0.357	178.6	0.050
1962	0.205	2,710.9	0.207	1,787.5	0.149	735.8	0.377	203.5	0.050
1963	0.207	2,836.6	0.210	1,847.1	0.151	760.1	0.366	230.0	0.050
1964	0.212	3,014.3	0.214	1,947.0	0.162	776.3	0.359	267.2	0.050
1965	0.219	3,187.0	0.221	2,050.3	0.167	800.1	0.378	296.6	0.048
1966	0.233	3,342.7	0.231	2,162.9	0.177	862.5	0.423	294.0	0.043
1967	0.232	3,466.4	0.231	2,243.0	0.183	927.6	0.399	290.3	0.045
1968	0.245	3,594.9	0.241	2,358.7	0.195	969.1	0.446	279.7	0.048
1969	0.258	3,698.4	0.255	2,455.7	0.198	984.4	0.471	277.3	0.048
1970	0.263	3,702.8	0.262	2,540.4	0.201	974.0	0.473	237.9	0.050
1971	0.277	3,840.9	0.277	2,615.7	0.215	973.0	0.475	274.2	0.050
1972	0.300	4,016.7	0.291	2,751.6	0.261	973.1	0.508	298.8	0.047
1973	0.330	4,161.8	0.308	2,878.4	0.296	961.0	0.632	318.3	0.048
1974	0.321	4,570.3	0.333	2,905.3	0.328	976.2	0.300	595.9	0.049
1975	0.374	4,195.5	0.353	2,983.5	0.362	997.8	0.690	223.2	0.049
1976	0.375	4,762.3	0.374	3,119.9	0.408	1,006.7	0.379	543.0	0.047
1977	0.428	4,705.1	0.406	3,247.2	0.435	1,027.0	0.652	379.2	0.044
1978	0.458	4,952.3	0.436	3,391.4	0.462	1,047.6	0.703	437.6	0.043
1979	0.487	5,091.0	0.469	3,497.8	0.465	1,060.6	0.755	453.2	0.042
1980	0.530	4,930.4	0.514	3,529.0	0.478	1,080.8	0.878	322.7	0.044
1981	0.579	5,050.0	0.559	3,575.6	0.539	1,099.3	0.926	358.1	0.048
1982	0.608	4,952.4	0.588	3,629.2	0.570	1,124.8	0.938	249.1	0.044
1983	0.644	5,198.9	0.611	3,785.1	0.661	1,151.4	0.928	296.8	0.044
1984	0.685	5,579.6	0.645	3,942.5	0.737	1,168.3	0.936	449.0	0.044
1985	0.699	5,788.5	0.665	4,137.3	0.726	1,226.1	0.956	422.3	0.044
1986	0.699	5,979.0	0.677	4,303.5	0.685	1,292.7	0.960	395.8	0.042
1987	0.716	6,174.8	0.697	4,480.3	0.703	1,316.3	0.939	396.5	0.042
1988	0.751	6,420.4	0.729	4,659.5	0.755	1,333.4	0.956	438.7	0.042
1989	0.780	6,633.8	0.760	4,810.5	0.778	1,357.6	0.975	472.2	0.042
1990	0.800	6,744.2	0.789	4,936.3	0.775	1,389.0	0.969	436.6	0.043
1991	0.833	6,720.4	0.814	4,991.0	0.826	1,405.0	1.047	361.2	0.046
1992	0.854	6,922.8	0.837	5,139.8	0.864	1,411.0	0.974	403.7	0.046
1993	0.869	7,108.1	0.865	5,289.2	0.826	1,409.4	1.000	438.0	0.045
1994	0.887	7,385.2	0.879	5,460.4	0.859	1,412.9	1.019	528.1	0.048
1995	0.908	7,570.0	0.907	5,616.0	0.857	1,417.8	1.024	550.2	0.046
1996	0.929	7,852.1	0.923	5,802.6	0.913	1,423.1	1.014	632.5	0.045
1997	0.953	8,210.1	0.946	6,016.1	0.943	1,448.3	1.028	743.9	0.044
1998	0.966	8,529.4	0.958	6,302.4	0.948	1,470.7	1.066	756.0	0.045
1999	0.980	8,917.2	0.977	6,595.8	0.963	1,514.1	1.037	805.4	0.043
2000	1.000	9,217.6	1.000	6,914.1	1.000	1,540.7	1.000	762.8	0.044
2001	1.028	9,254.1	1.021	7,113.6	1.048	1,586.1	1.058	558.9	0.042
2002	1.042	9,380.6	1.029	7,327.6	1.078	1,649.1	1.096	415.5	0.043
2003	1.077	9,677.3	1.058	7,571.7	1.160	1,687.0	1.044	431.6	0.042
2004	1.093	10,040.1	1.086	7,845.7	1.128	1,710.8	1.038	501.3	0.042
2005	1.113	10,358.4	1.105	8,123.2	1.178	1,725.3	0.986	531.3	0.040
2006	1.143	10,644.1	1.130	8,387.1	1.239	1,756.1	0.983	521.4	0.043

Table 23: Income and Expenditures Account, Property Income, 1948-2006

(Constant pric **Income, 1948-2006**

	Property Income		ROW Property Income		Domestic Property Income	
Year	Price	Quantity	Price	Quantity	Price	Quantity
1948	0.216	571.9	0.139	63.6	0.225	509.2
1949	0.191	611.8	0.132	58.7	0.198	550.7
1950	0.212	660.0	0.149	71.5	0.220	588.6
1951	0.230	713.2	0.151	83.5	0.239	632.0
1952	0.224	762.8	0.153	99.5	0.232	669.4
1953	0.222	799.8	0.154	106.9	0.230	700.2
1954	0.224	829.0	0.157	104.4	0.232	730.1
1955	0.230	871.1	0.160	113.6	0.238	764.5
1956	0.229	912.8	0.168	117.4	0.236	802.2
1957	0.223	947.3	0.175	119.8	0.229	834.1
1958	0.242	969.7	0.181	117.9	0.248	857.3
1959	0.239	998.5	0.184	120.4	0.245	883.5
1960	0.250	1,043.2	0.183	135.5	0.257	916.0
1961	0.245	1,072.3	0.186	134.5	0.251	945.0
1962	0.253	1,111.1	0.192	142.3	0.260	977.0
1963	0.256	1,160.7	0.192	153.9	0.263	1,016.8
1964	0.270	1,212.5	0.198	162.7	0.278	1,060.7
1965	0.287	1,268.1	0.205	165.5	0.296	1,112.6
1966	0.306	1,329.0	0.212	156.3	0.317	1,177.8
1967	0.294	1,398.9	0.217	161.7	0.303	1,241.6
1968	0.304	1,475.5	0.228	180.5	0.313	1,302.5
1969	0.308	1,550.3	0.235	191.3	0.316	1,367.3
1970	0.294	1,604.1	0.249	187.4	0.299	1,423.0
1971	0.319	1,662.8	0.266	193.0	0.325	1,476.2
1972	0.359	1,731.5	0.279	192.7	0.368	1,543.7
1973	0.390	1,831.7	0.298	220.9	0.400	1,620.2
1974	0.397	1,906.7	0.318	232.6	0.405	1,684.5
1975	0.430	1,936.9	0.351	211.0	0.438	1,731.3
1976	0.478	2,004.1	0.379	227.6	0.488	1,784.0
1977	0.523	2,081.3	0.404	234.6	0.536	1,854.1
1978	0.562	2,173.3	0.434	242.1	0.575	1,938.2
1979	0.573	2,274.6	0.468	258.0	0.584	2,025.0
1980	0.572	2,349.4	0.507	261.9	0.578	2,095.4
1981	0.632	2,420.2	0.555	270.1	0.639	2,158.3
1982	0.634	2,454.1	0.594	246.1	0.636	2,213.5
1983	0.711	2,517.2	0.626	250.3	0.718	2,272.4
1984	0.789	2,623.0	0.647	266.1	0.803	2,363.4
1985	0.793	2,729.6	0.674	258.4	0.804	2,474.8
1986	0.775	2,840.9	0.654	258.7	0.786	2,584.2
1987	0.785	2,941.4	0.694	254.8	0.793	2,686.7
1988	0.831	3,057.9	0.724	273.7	0.841	2,785.5
1989	0.875	3,164.1	0.768	282.4	0.885	2,882.9
1990	0.868	3,261.5	0.807	294.6	0.873	2,968.5
1991	0.877	3,385.4	0.831	357.6	0.881	3,032.8
1992	0.912	3,416.9	0.832	323.9	0.919	3,095.3
1993	0.928	3,489.5	0.879	316.7	0.933	3,174.0
1994	0.959	3,612.7	0.900	342.7	0.965	3,272.3
1995	0.979	3,738.4	0.932	350.8	0.983	3,389.6
1996	1.013	3,880.4	0.956	354.4	1.018	3,527.6
1997	1.044	4,054.5	0.973	361.8	1.051	3,693.8
1998	1.021	4,255.8	0.973	361.9	1.026	3,893.9
1999	1.019	4,506.6	0.980	386.9	1.022	4,119.9
2000	1.000	4,745.5	1.000	396.8	1.000	4,348.7
2001	1.012	4,937.2	1.016	393.0	1.011	4,544.2
2002	1.018	5,089.2	1.020	390.6	1.018	4,698.7
2003	1.071	5,254.4	1.046	412.8	1.073	4,841.8
2004	1.095	5,413.9	1.082	426.1	1.096	4,988.0
2005	1.124	5,543.3	1.110	393.8	1.125	5,149.3
2006	1.144	5,749.6	1.128	430.1	1.145	5,319.5

Table 24: Income and Expenditures Account, Income, 1948-2006

*(Constant)***r Income, 1948-2006**

	Net Income		Labor Income		Net Property Income	
Year	Price	Quantity	Price	Quantity	Price	Quantity
1948	0.106	2,447.6	0.077	2,245.8	0.203	429.5
1949	0.102	2,448.2	0.080	2,184.1	0.168	456.0
1950	0.110	2,583.0	0.082	2,276.8	0.194	493.4
1951	0.117	2,793.1	0.087	2,465.0	0.212	532.3
1952	0.118	2,915.5	0.090	2,537.0	0.203	571.0
1953	0.121	3,009.4	0.094	2,599.5	0.199	598.2
1954	0.123	2,986.9	0.096	2,538.3	0.201	613.7
1955	0.128	3,105.0	0.100	2,615.2	0.207	649.2
1956	0.131	3,200.1	0.106	2,679.2	0.202	677.2
1957	0.133	3,243.1	0.111	2,685.7	0.189	702.6
1958	0.141	3,205.1	0.114	2,619.9	0.214	713.6
1959	0.143	3,319.6	0.119	2,710.6	0.206	740.7
1960	0.150	3,406.9	0.123	2,749.3	0.220	778.7
1961	0.150	3,454.7	0.126	2,769.9	0.213	800.0
1962	0.156	3,581.2	0.130	2,861.8	0.222	834.9
1963	0.159	3,686.9	0.133	2,919.1	0.226	875.4
1964	0.167	3,813.6	0.139	3,003.3	0.243	914.9
1965	0.177	3,949.5	0.144	3,097.1	0.265	954.9
1966	0.189	4,123.4	0.151	3,238.3	0.289	994.3
1967	0.190	4,228.2	0.159	3,285.2	0.271	1,039.2
1968	0.202	4,369.7	0.171	3,359.3	0.279	1,095.5
1969	0.211	4,512.8	0.183	3,446.6	0.279	1,145.8
1970	0.216	4,492.6	0.199	3,386.8	0.255	1,172.4
1971	0.234	4,548.7	0.212	3,391.5	0.283	1,215.7
1972	0.257	4,693.4	0.227	3,482.7	0.328	1,266.4
1973	0.279	4,920.0	0.243	3,627.0	0.366	1,343.6
1974	0.294	4,983.4	0.266	3,637.8	0.361	1,386.1
1975	0.317	4,944.5	0.287	3,589.1	0.387	1,390.3
1976	0.350	5,101.6	0.311	3,691.5	0.441	1,442.8
1977	0.381	5,282.1	0.335	3,820.7	0.491	1,494.9
1978	0.412	5,513.1	0.362	3,997.1	0.529	1,553.9
1979	0.434	5,715.3	0.394	4,136.4	0.526	1,616.1
1980	0.456	5,737.5	0.435	4,116.1	0.498	1,651.8
1981	0.501	5,833.8	0.476	4,161.0	0.555	1,700.5
1982	0.520	5,789.0	0.508	4,111.6	0.540	1,703.0
1983	0.567	5,907.3	0.530	4,184.2	0.646	1,748.0
1984	0.615	6,213.2	0.554	4,420.2	0.755	1,823.4
1985	0.634	6,378.8	0.580	4,528.3	0.755	1,879.3
1986	0.644	6,490.2	0.608	4,581.1	0.723	1,933.2
1987	0.660	6,692.0	0.627	4,745.6	0.730	1,974.6
1988	0.698	6,912.2	0.656	4,896.6	0.788	2,043.9
1989	0.727	7,118.5	0.674	5,049.3	0.845	2,099.6
1990	0.743	7,262.0	0.704	5,144.4	0.826	2,147.4
1991	0.767	7,302.0	0.736	5,088.8	0.831	2,232.2
1992	0.809	7,315.4	0.773	5,097.7	0.883	2,236.7
1993	0.823	7,499.1	0.786	5,246.4	0.901	2,274.7
1994	0.845	7,748.6	0.801	5,418.2	0.938	2,352.8
1995	0.863	7,965.5	0.817	5,566.4	0.960	2,421.6
1996	0.896	8,140.8	0.842	5,654.3	1.013	2,504.1
1997	0.929	8,415.5	0.867	5,820.2	1.063	2,609.0
1998	0.945	8,718.3	0.903	6,000.4	1.033	2,727.6
1999	0.971	8,996.6	0.943	6,119.4	1.031	2,879.5
2000	1.000	9,217.9	1.000	6,216.1	1.000	3,001.8
2001	1.029	9,241.2	1.035	6,164.6	1.019	3,077.1
2002	1.052	9,288.9	1.061	6,151.6	1.034	3,138.8
2003	1.107	9,410.1	1.098	6,184.2	1.124	3,227.4
2004	1.144	9,587.7	1.138	6,278.7	1.157	3,310.2
2005	1.184	9,739.7	1.181	6,385.1	1.189	3,355.9
2006	1.205	10,092.6	1.203	6,627.5	1.209	3,466.3

Table 25: Income and Expenditures Account, Level of Living, 1948-2006

(Constant prices **r Income, 1948-2006**

	Net Expenditures		Net Income		
Year	Price	Quantity	Price	Quantity	Level of Living
1948	0.158	1,656.1	0.106	2,447.6	0.677
1949	0.152	1,654.6	0.102	2,448.2	0.676
1950	0.153	1,862.6	0.110	2,583.0	0.721
1951	0.166	1,975.9	0.117	2,793.1	0.707
1952	0.168	2,051.3	0.118	2,915.5	0.704
1953	0.173	2,106.7	0.121	3,009.4	0.700
1954	0.175	2,099.5	0.123	2,986.9	0.703
1955	0.176	2,254.6	0.128	3,105.0	0.726
1956	0.183	2,297.4	0.131	3,200.1	0.718
1957	0.184	2,345.0	0.133	3,243.1	0.723
1958	0.200	2,256.0	0.141	3,205.1	0.704
1959	0.192	2,471.5	0.143	3,319.6	0.744
1960	0.203	2,511.2	0.150	3,406.9	0.737
1961	0.202	2,571.1	0.150	3,454.7	0.744
1962	0.205	2,710.9	0.156	3,581.2	0.757
1963	0.207	2,836.6	0.159	3,686.9	0.769
1964	0.212	3,014.3	0.167	3,813.6	0.790
1965	0.219	3,187.0	0.177	3,949.5	0.807
1966	0.233	3,342.7	0.189	4,123.4	0.811
1967	0.232	3,466.4	0.190	4,228.2	0.820
1968	0.245	3,594.9	0.202	4,369.7	0.823
1969	0.258	3,698.4	0.211	4,512.8	0.820
1970	0.263	3,702.8	0.216	4,492.6	0.824
1971	0.277	3,840.9	0.234	4,548.7	0.844
1972	0.300	4,016.7	0.257	4,693.4	0.856
1973	0.330	4,161.8	0.279	4,920.0	0.846
1974	0.321	4,570.3	0.294	4,983.4	0.917
1975	0.374	4,195.5	0.317	4,944.5	0.849
1976	0.375	4,762.3	0.350	5,101.6	0.933
1977	0.428	4,705.1	0.381	5,282.1	0.891
1978	0.458	4,952.3	0.412	5,513.1	0.898
1979	0.487	5,091.0	0.434	5,715.3	0.891
1980	0.530	4,930.4	0.456	5,737.5	0.859
1981	0.579	5,050.0	0.501	5,833.8	0.866
1982	0.608	4,952.4	0.520	5,789.0	0.855
1983	0.644	5,198.9	0.567	5,907.3	0.880
1984	0.685	5,579.6	0.615	6,213.2	0.898
1985	0.699	5,788.5	0.634	6,378.8	0.907
1986	0.699	5,979.0	0.644	6,490.2	0.921
1987	0.716	6,174.8	0.660	6,692.0	0.923
1988	0.751	6,420.4	0.698	6,912.2	0.929
1989	0.780	6,633.8	0.727	7,118.5	0.932
1990	0.800	6,744.2	0.743	7,262.0	0.929
1991	0.833	6,720.4	0.767	7,302.0	0.920
1992	0.854	6,922.8	0.809	7,315.4	0.946
1993	0.869	7,108.1	0.823	7,499.1	0.948
1994	0.887	7,385.2	0.845	7,748.6	0.953
1995	0.908	7,570.0	0.863	7,965.5	0.950
1996	0.929	7,852.1	0.896	8,140.8	0.965
1997	0.953	8,210.1	0.929	8,415.5	0.976
1998	0.966	8,529.4	0.945	8,718.3	0.978
1999	0.980	8,917.2	0.971	8,996.6	0.991
2000	1.000	9,217.6	1.000	9,217.9	1.000
2001	1.028	9,254.1	1.029	9,241.2	1.001
2002	1.042	9,380.6	1.052	9,288.9	1.010
2003	1.077	9,677.3	1.107	9,410.1	1.028
2004	1.093	10,040.1	1.144	9,587.7	1.047
2005	1.113	10,358.4	1.184	9,739.7	1.064
2006	1.143	10,644.1	1.205	10,092.6	1.055

Table 26: Domestic Capital Account, Investment, 1948-2006

(Constant **Income, 1948-2006**

	Gross Investment		Private Investment		Government Investment		Effective Sales Tax Rate on Investment
Year	Price	Quantity	Price	Quantity	Price	Quantity	Expenditures
1948	0.244	332.2	0.252	284.3	0.172	41.3	0.046
1949	0.245	300.1	0.256	245.0	0.172	56.9	0.048
1950	0.232	404.0	0.262	327.5	0.169	58.7	0.046
1951	0.269	406.2	0.282	322.2	0.189	92.8	0.043
1952	0.273	391.3	0.283	296.6	0.193	115.8	0.046
1953	0.288	390.7	0.289	310.6	0.190	126.2	0.048
1954	0.278	390.7	0.289	296.8	0.189	119.0	0.045
1955	0.286	451.8	0.294	366.1	0.193	109.0	0.045
1956	0.302	448.2	0.305	359.1	0.210	109.5	0.044
1957	0.315	445.2	0.316	351.4	0.220	111.2	0.045
1958	0.339	380.5	0.317	320.1	0.219	121.2	0.046
1959	0.320	466.0	0.326	371.3	0.221	132.6	0.049
1960	0.329	467.2	0.327	373.7	0.219	128.6	0.051
1961	0.329	472.9	0.327	367.4	0.221	142.4	0.050
1962	0.340	506.3	0.330	409.6	0.225	147.9	0.050
1963	0.337	545.8	0.330	439.7	0.228	147.6	0.050
1964	0.335	598.9	0.333	476.3	0.230	150.4	0.050
1965	0.345	646.5	0.337	538.6	0.234	151.9	0.048
1966	0.366	663.6	0.340	586.3	0.251	158.6	0.043
1967	0.360	682.6	0.348	572.5	0.258	166.3	0.045
1968	0.387	690.4	0.362	613.7	0.268	162.1	0.048
1969	0.405	710.0	0.376	644.6	0.285	151.8	0.048
1970	0.415	686.7	0.390	608.1	0.309	141.6	0.050
1971	0.428	742.7	0.408	673.8	0.331	126.2	0.050
1972	0.453	787.8	0.423	751.2	0.364	116.9	0.047
1973	0.509	833.2	0.442	832.2	0.389	120.3	0.048
1974	0.382	1,136.5	0.483	770.0	0.444	126.8	0.049
1975	0.558	804.1	0.535	679.6	0.478	131.9	0.049
1976	0.464	1,135.0	0.565	797.7	0.495	134.0	0.047
1977	0.596	1,008.1	0.601	902.6	0.519	130.2	0.044
1978	0.640	1,104.1	0.646	990.6	0.553	139.3	0.043
1979	0.688	1,158.5	0.701	1,009.3	0.599	147.8	0.042
1980	0.770	1,046.2	0.764	908.5	0.660	152.1	0.044
1981	0.828	1,107.4	0.832	966.2	0.725	147.3	0.048
1982	0.861	1,010.2	0.873	867.6	0.770	146.0	0.044
1983	0.866	1,080.0	0.877	963.5	0.783	156.8	0.044
1984	0.875	1,273.7	0.883	1,203.3	0.791	176.0	0.044
1985	0.888	1,292.9	0.892	1,232.9	0.795	199.9	0.044
1986	0.898	1,317.5	0.906	1,269.0	0.796	217.5	0.042
1987	0.904	1,371.8	0.927	1,302.0	0.802	229.8	0.042
1988	0.923	1,461.0	0.947	1,346.1	0.814	228.5	0.042
1989	0.943	1,543.9	0.968	1,390.9	0.832	237.8	0.042
1990	0.952	1,554.8	0.983	1,358.8	0.852	253.1	0.043
1991	0.984	1,515.4	0.995	1,263.2	0.865	254.7	0.046
1992	0.969	1,584.3	0.996	1,353.9	0.869	256.5	0.046
1993	0.986	1,652.6	1.008	1,468.0	0.888	246.6	0.045
1994	1.004	1,788.9	1.025	1,638.1	0.911	243.0	0.048
1995	1.016	1,867.1	1.038	1,692.1	0.936	248.6	0.046
1996	1.014	2,008.9	1.031	1,835.6	0.947	258.5	0.045
1997	1.015	2,190.3	1.021	2,040.3	0.953	264.5	0.044
1998	1.022	2,284.7	1.004	2,249.8	0.959	273.7	0.045
1999	1.009	2,433.3	0.997	2,450.7	0.975	294.1	0.043
2000	1.000	2,506.5	1.000	2,598.7	1.000	304.4	0.044
2001	1.016	2,413.9	1.000	2,497.1	1.014	319.4	0.042
2002	1.017	2,351.0	0.993	2,524.1	1.026	335.4	0.043
2003	1.003	2,444.3	0.990	2,633.3	1.038	343.1	0.042
2004	1.010	2,594.2	1.007	2,851.3	1.076	346.2	0.042
2005	1.019	2,712.8	1.033	3,002.6	1.142	348.4	0.040
2006	1.034	2,802.2	1.053	3,094.1	1.201	361.1	0.043

Table 27: Domestic Capital Account, Change in Wealth, 1948-2006

(Constant **Income, 1948-2006**

	Gross Saving		Depreciation		Net Saving		Revaluation		Change in Wealth	
Year	Price	Quantity	Price	Quantity	Price	Quantity	Price	Quantity	Price	Quantity
1948	0.244	332.2	0.239	152.7	0.267	167.7				
1949	0.245	300.1	0.244	166.0	0.261	125.9	-0.001	819.5	0.066	478.4
1950	0.232	404.0	0.248	178.0	0.231	214.9	0.008	890.7	0.071	800.9
1951	0.269	406.2	0.265	193.0	0.287	202.2	0.116	993.1	0.215	805.6
1952	0.273	391.3	0.267	205.2	0.294	177.1	0.018	1,014.6	0.093	757.7
1953	0.288	390.7	0.273	215.6	0.320	167.5	0.015	1,010.5	0.095	725.5
1954	0.278	390.7	0.273	228.1	0.295	156.3	0.020	1,044.0	0.097	696.1
1955	0.286	451.8	0.279	236.4	0.307	205.9	0.024	1,022.2	0.105	838.9
1956	0.302	448.2	0.291	250.0	0.330	190.4	0.088	1,061.8	0.191	816.4
1957	0.315	445.2	0.303	259.5	0.343	179.2	0.048	1,096.7	0.141	807.1
1958	0.339	380.5	0.304	269.4	0.411	114.7	0.044	1,105.8	0.150	644.1
1959	0.320	466.0	0.315	273.4	0.335	187.7	0.036	1,112.9	0.121	847.4
1960	0.329	467.2	0.317	282.3	0.356	180.6	0.048	1,103.7	0.142	825.8
1961	0.329	472.9	0.317	290.5	0.357	178.6	0.039	1,135.8	0.130	830.8
1962	0.340	506.3	0.321	297.0	0.377	203.5	0.054	1,095.2	0.154	882.2
1963	0.337	545.8	0.324	308.0	0.366	230.0	0.030	1,144.1	0.122	969.1
1964	0.335	598.9	0.326	321.4	0.359	267.2	0.004	1,173.1	0.092	1,102.4
1965	0.345	646.5	0.329	337.7	0.378	296.6	0.030	1,204.5	0.123	1,209.7
1966	0.366	663.6	0.331	359.3	0.423	294.0	0.068	1,249.3	0.172	1,217.1
1967	0.360	682.6	0.338	384.4	0.399	290.3	0.055	1,332.6	0.152	1,239.2
1968	0.387	690.4	0.351	405.9	0.446	279.7	0.126	1,377.0	0.241	1,234.9
1969	0.405	710.0	0.364	430.6	0.471	277.3	0.163	1,369.8	0.288	1,226.9
1970	0.415	686.7	0.379	455.0	0.473	237.9	0.116	1,586.3	0.233	1,269.6
1971	0.428	742.7	0.397	471.4	0.475	274.2	0.135	1,515.3	0.256	1,303.8
1972	0.453	787.8	0.419	490.5	0.508	298.8	0.301	1,462.6	0.452	1,308.7
1973	0.509	833.2	0.432	515.7	0.632	318.3	0.298	1,333.6	0.479	1,249.6
1974	0.382	1,136.5	0.468	546.9	0.300	595.9	0.351	1,448.7	0.431	1,596.7
1975	0.558	804.1	0.517	569.1	0.690	223.2	0.276	1,695.5	0.445	1,399.3
1976	0.464	1,135.0	0.547	585.4	0.379	543.0	0.191	1,938.7	0.286	2,011.0
1977	0.596	1,008.1	0.579	611.0	0.652	379.2	0.581	1,285.7	0.734	1,354.7
1978	0.640	1,104.1	0.619	644.0	0.703	437.6	0.579	1,538.9	0.746	1,606.6
1979	0.688	1,158.5	0.667	682.4	0.755	453.2	0.762	1,566.2	0.935	1,641.9
1980	0.770	1,046.2	0.727	717.6	0.878	322.7	0.645	1,804.2	0.846	1,710.2
1981	0.828	1,107.4	0.791	740.0	0.926	358.1	0.651	2,191.6	0.861	2,041.6
1982	0.861	1,010.2	0.832	764.7	0.938	249.1	0.258	2,367.7	0.425	1,991.1
1983	0.866	1,080.0	0.843	783.6	0.928	296.8	0.239	1,759.8	0.401	1,734.2
1984	0.875	1,273.7	0.852	814.8	0.936	449.0	0.457	2,169.9	0.615	2,295.5
1985	0.888	1,292.9	0.861	864.1	0.956	422.3	0.682	1,708.5	0.826	1,898.8
1986	0.898	1,317.5	0.875	918.6	0.960	395.8	0.478	1,735.8	0.642	1,885.2
1987	0.904	1,371.8	0.891	973.3	0.939	396.5	0.596	1,856.0	0.748	1,978.9
1988	0.923	1,461.0	0.912	1,019.4	0.956	438.7	0.655	1,936.3	0.806	2,095.0
1989	0.943	1,543.9	0.932	1,068.2	0.975	472.2	0.608	1,972.1	0.766	2,165.1
1990	0.952	1,554.8	0.948	1,116.1	0.969	436.6	0.118	2,004.5	0.313	2,106.9
1991	0.984	1,515.4	0.963	1,155.7	1.047	361.2	0.034	2,061.2	0.243	1,843.1
1992	0.969	1,584.3	0.966	1,180.9	0.974	403.7	0.053	2,062.4	0.249	2,018.1
1993	0.986	1,652.6	0.980	1,214.7	1.000	438.0	0.273	2,246.0	0.479	2,192.9
1994	1.004	1,788.9	0.998	1,259.7	1.019	528.1	0.178	2,464.3	0.388	2,518.5
1995	1.016	1,867.1	1.014	1,315.8	1.024	550.2	0.376	2,054.9	0.570	2,340.4
1996	1.014	2,008.9	1.015	1,375.0	1.014	632.5	0.285	2,301.3	0.489	2,652.6
1997	1.015	2,190.3	1.010	1,444.3	1.028	743.9	0.241	1,877.4	0.458	2,657.5
1998	1.022	2,284.7	1.001	1,527.5	1.066	756.0	0.660	1,960.0	0.767	2,736.8
1999	1.009	2,433.3	0.997	1,626.6	1.037	805.4	0.766	2,370.5	0.837	3,166.4
2000	1.000	2,506.5	1.000	1,743.7	1.000	762.8	1.000	2,037.4	1.000	2,800.3
2001	1.016	2,413.9	1.000	1,860.5	1.058	558.9	0.738	1,815.9	0.819	2,358.3
2002	1.017	2,351.0	0.992	1,951.8	1.096	415.5	1.033	2,478.2	1.077	2,801.3
2003	1.003	2,444.3	0.985	2,029.7	1.044	431.6	1.016	3,003.0	1.054	3,322.2
2004	1.010	2,594.2	0.996	2,108.8	1.038	501.3	1.311	2,941.9	1.317	3,323.9
2005	1.019	2,712.8	1.019	2,198.2	0.986	531.3	1.258	4,776.9	1.263	5,172.7
2006	1.034	2,802.2	1.039	2,296.8	0.983	521.4	0.841	5,714.9	0.875	6,081.2

Table 28: Wealth, 1948-2006

(Constant **r Income, 1948-2006**

	Wealth		Private Domestic Tangible Assets		Government Tangible Assets	
Year	Price	Quantity	Price	Quantity	Price	Quantity
1948	0.097	8,458.4	0.106	5,155.4	0.086	3,050.8
1949	0.097	8,786.2	0.105	5,473.3	0.087	3,031.0
1950	0.097	9,311.4	0.107	5,964.3	0.086	3,020.3
1951	0.110	9,836.8	0.121	6,391.9	0.096	3,085.1
1952	0.112	10,298.2	0.122	6,724.2	0.099	3,196.1
1953	0.113	10,784.7	0.123	7,068.0	0.100	3,321.8
1954	0.115	11,188.7	0.126	7,353.4	0.100	3,426.1
1955	0.117	11,723.3	0.129	7,776.3	0.103	3,506.8
1956	0.125	12,204.8	0.136	8,152.7	0.113	3,587.1
1957	0.130	12,642.6	0.139	8,489.7	0.121	3,669.3
1958	0.134	12,990.6	0.144	8,730.5	0.123	3,767.2
1959	0.137	13,463.2	0.147	9,072.8	0.125	3,882.0
1960	0.141	13,903.3	0.151	9,395.9	0.128	3,984.0
1961	0.144	14,319.6	0.155	9,680.9	0.130	4,105.3
1962	0.149	14,814.8	0.160	10,035.8	0.134	4,231.4
1963	0.151	15,342.8	0.162	10,426.9	0.137	4,351.8
1964	0.152	15,923.2	0.161	10,868.2	0.140	4,472.5
1965	0.155	16,609.7	0.163	11,411.0	0.143	4,593.8
1966	0.160	17,369.1	0.169	12,007.1	0.148	4,734.4
1967	0.164	18,052.3	0.173	12,524.0	0.154	4,883.5
1968	0.174	18,764.8	0.184	13,078.6	0.161	5,020.1
1969	0.186	19,463.9	0.197	13,637.0	0.173	5,136.5
1970	0.195	20,019.6	0.205	14,076.3	0.188	5,234.3
1971	0.205	20,650.1	0.215	14,610.6	0.201	5,306.3
1972	0.226	21,362.8	0.237	15,240.7	0.222	5,359.1
1973	0.245	22,154.3	0.255	15,945.3	0.242	5,414.8
1974	0.268	22,788.9	0.272	16,491.3	0.282	5,486.8
1975	0.290	23,244.4	0.292	16,855.1	0.310	5,569.3
1976	0.306	23,890.9	0.310	17,409.6	0.325	5,650.5
1977	0.337	24,663.0	0.340	18,099.7	0.349	5,721.2
1978	0.373	25,528.3	0.377	18,874.7	0.378	5,801.4
1979	0.420	26,352.1	0.422	19,602.6	0.419	5,891.4
1980	0.466	26,941.4	0.464	20,099.0	0.476	5,983.5
1981	0.519	27,572.5	0.522	20,647.4	0.535	6,064.0
1982	0.543	28,002.3	0.549	20,997.3	0.561	6,138.7
1983	0.558	28,536.0	0.564	21,464.2	0.571	6,224.8
1984	0.592	29,273.7	0.608	22,226.3	0.584	6,331.1
1985	0.631	29,982.5	0.657	22,916.2	0.585	6,462.2
1986	0.658	30,669.6	0.680	23,560.2	0.613	6,605.2
1987	0.692	31,274.0	0.713	24,173.4	0.645	6,748.3
1988	0.731	31,900.4	0.753	24,777.8	0.673	6,875.6
1989	0.767	32,625.7	0.794	25,365.9	0.704	7,003.6
1990	0.774	33,217.5	0.802	25,856.9	0.720	7,140.7
1991	0.776	33,651.2	0.804	26,191.8	0.729	7,271.9
1992	0.778	34,111.0	0.809	26,611.8	0.739	7,397.5
1993	0.800	34,505.6	0.814	27,136.6	0.754	7,504.6
1994	0.817	34,986.4	0.819	27,825.8	0.779	7,602.6
1995	0.838	35,709.1	0.843	28,514.2	0.805	7,703.5
1996	0.857	36,444.2	0.856	29,289.5	0.832	7,811.9
1997	0.868	37,289.6	0.874	30,202.5	0.857	7,922.1
1998	0.902	38,382.6	0.912	31,214.7	0.896	8,037.5
1999	0.949	39,334.6	0.950	32,282.5	0.941	8,167.0
2000	1.000	40,053.7	1.000	33,336.3	1.000	8,298.4
2001	1.032	40,655.7	1.040	34,136.7	1.047	8,436.8
2002	1.096	41,022.9	1.088	34,850.2	1.107	8,581.5
2003	1.173	41,300.0	1.143	35,565.1	1.161	8,723.0
2004	1.268	41,726.8	1.217	36,379.9	1.246	8,858.0
2005	1.417	41,925.7	1.322	37,221.5	1.379	8,985.7
2006	1.537	42,110.5	1.402	38,030.0	1.490	9,115.2

Table 29: Contributions to Output and Growth, 1948-2006

Output	1948-2006	1948-1973	1973-1995	1995-2000	2000-2006
Gross Domestic Product	3.45	4.01	2.81	4.26	2.77
Contribution of Consumption	2.48	2.85	2.08	2.60	2.33
Contribution of Investment	0.96	1.16	0.72	1.66	0.45
Growth	**1948-2006**	**1948-1973**	**1973-1995**	**1995-2000**	**2000-2006**
Gross Domestic Income	2.76	3.01	2.54	3.38	2.04
Contribution of Capital Services	1.68	1.89	1.42	2.12	1.43
Contribution of Labor Services	1.08	1.12	1.12	1.26	0.61
Multifactor Productivity	0.68	1.00	0.27	0.87	0.73

Table 30: Contributions to Expenditure, 1948-2006

ncome, 1948-2006

Expenditure	1948-2006	1948-1973	1973-1995	1995-2000	2000-2006
Income	2.44	2.79	2.19	2.92	1.51
Contribution of Labor Income	1.22	1.26	1.28	1.45	0.70
Contribution of Net Property Income	1.22	1.53	0.91	1.47	0.82
Level of Living	0.77	0.89	0.53	1.02	0.89

Net Expenditure	1948-2006	1948-1973	1973-1995	1995-2000	2000-2006
Net Expenditures	3.21	3.69	2.72	3.94	2.40
Consumption	2.97	3.36	2.48	3.34	2.87
Contribution of Personal Consumption	2.49	2.71	2.10	3.06	2.48
Contribution of Government Consumption	0.49	0.65	0.38	0.28	0.39
Net Saving	0.24	0.33	0.24	0.60	-0.47

Table 31: Contributions to Investment and Saving, 1948-2006

Investment	1948-2006	1948-1973	1973-1995	1995-2000	2000-2006
Gross Investment	3.68	3.68	3.67	5.89	1.86
Contribution of Private Investment	3.71	3.58	2.98	8.21	3.20
Contribution of Government Investment	0.52	0.65	0.43	0.47	0.39
Contribution of ROW Investment	-0.56	-0.55	0.26	-2.80	-1.73
Saving	**1948-2006**	**1948-1973**	**1973-1995**	**1995-2000**	**2000-2006**
Saving	3.68	3.68	3.67	5.89	1.86
Contribution of Net Saving	0.80	1.07	0.89	2.12	-1.75
Contribution of Depreciation	2.88	2.61	2.78	3.77	3.61

Table 32: Contributions to Change in Wealth, 1948-2006

ncome, 1948-2006

Change in Wealth	1948-2006	1948-1973	1973-1995	1995-2000	2000-2006
Change in Wealth	4.46	4.00	2.85	3.59	12.92
Contribution of Net Saving	2.02	3.41	1.33	3.39	-2.16
Contribution of Revaluation	2.44	0.59	1.52	0.20	15.09

Wealth	1948-2006	1948-1973	1973-1995	1995-2000	2000-2006
Wealth	2.77	3.85	2.17	2.30	0.83
Contribution of Private Tangible Assets	2.58	3.25	2.03	2.55	1.84
Contribution of Government Tangible Assets	0.45	0.60	0.35	0.31	0.33
Contribution of International Position	-0.27	0.00	-0.21	-0.57	-1.33