

CHAPTER 12: RENTAL INCOME OF PERSONS

(Updated: October 2019)

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Table 12A--Summary of Methodology for Rental Income of Persons

Rental income of persons reflects the income earned by persons for the provision, to others, of their property. The featured measure of rental income of persons—rental income of persons with capital consumption adjustment—is provided net of depreciation and the costs associated with providing property. As such, it can be viewed as a “profit-like” measure.

In the summary NIPA tables, rental income of persons is a component of gross domestic income and of national income for the total economy, as well as measures of personal income and of private enterprise income.

Definitions and Concepts

Rental income of persons reflects the income that accrues from the provision of property (i.e., housing or other structures, equipment, intellectual property, or natural resources) owned by persons who are resident in the United States.¹ As shown in the sample of NIPA table 7.9 below, separate measures of rental income are provided for legal forms of organizations—for “other private business” and for “households and nonprofit institutions.”² The NIPAs classify persons that own property as either part of the household and NPISH sector or as part of the business sector. Specifically, individuals that rent property and are required to report rental and royalty income on the IRS individual income tax return, and tax-exempt cooperatives, are classified as part of “other private business,” a subsector of the NIPA business sector.³ Individuals that occupy the homes that they own are treated as unincorporated businesses and are classified in the household and institutions sector. Because both types of property owners reflect individuals or households, their rental and royalty incomes are included in the

¹ Persons resident in the United States are those who are physically located in the United States and who have resided, or expect to reside, in this country for 1 year or more. For more information on residence, see “Definitions and Concepts” in [Chapter 8: Net Exports of Goods and Services](#)” of this handbook.

² For more information on legal forms, see [chapter 2](#) of this handbook.

³ Rental and royalty income are reported on IRS Schedule E, Supplemental Income and Loss, a section of the individual income tax return. “Other private business” also includes entities that are not required to file but would be so required if they met size or income criteria.

NIPA measure of rental income of persons (and therefore, as a component of personal income).⁴ The NIPAs also provide measures of income from the rental of property owned by persons who are classified as proprietors or partnerships (included in proprietors' income), by corporations (in corporate profits), and by governments (as part of government rents and royalties).

As noted in "[Chapter 2: Fundamental Concepts](#)," the NIPA production boundary for households is limited to the housing services provided by homeowners to themselves ("owner-occupied housing") and the production of domestic services (e.g., market cleaning services). Thus, the rental income of households is limited to the services of owner-occupied housing. The provision of nonresidential properties, of rights to intellectual and natural resources, and of permanent-site housing services to tenants more closely resembles business activity; as such, it is recorded as production and income of other private business or of NPISH. Measures of nonmarket household production, such as housework and childcare, are excluded from the NIPAs.⁵ The incomes associated with the production by households of other market goods and services are recorded as proprietors' income.⁶

Separate measures of rental income are provided by type of property and by type of occupant. Specifically, for other private business, separate measures are prepared for rental income from farm and nonfarm tenant-occupied permanent-site housing, from nonresidential properties (structures, equipment, and the real estate investments of private pension plans), and from the rights to intellectual property and natural resources (recorded as royalties). For households and NPISH, measures are prepared for rental income from nonfarm owner-occupied permanent-site dwellings and manufactured homes, from farm owner-occupied housing, and from tenant-occupied housing owned by NPISH. By convention, all rental income of persons from tenant-occupied housing is recorded as other private business or as NPISH; also by convention, rental income from tenant-occupied manufactured homes owned by persons is recorded as proprietors' income.

Table 12.1 shows the types of transactions that are included in, and excluded from, rental income of persons.

⁴ The NIPAs also provide measures of the income and outlays of the households and institutions sector that exclude the income of "other private business," and, as part of the 2003 comprehensive revision of the NIPAs, BEA began providing separate estimates of household and of NPISH income and outlays; see Charles Ian Mead, Clinton P. McCully, and Marshall B. Reinsdorf, "[Income and Outlays of Households and of Nonprofit Institutions Serving Households](#)," *Survey of Current Business* volume 83 (April 2003): 13-17. Additionally, the NIPAs provide measures of saving and investment of households and institutions sector that exclude "other private business."

⁵ BEA has prepared alternative measures of household output that include the value of nonmarket household production; see Benjamin Bridgman, "[Accounting for Household Production in the National Accounts](#)," *Survey*, volume 96 (February 2016): 1-5.

⁶ Before 2003, the services of owner-occupied housing were also classified as output of the business sector. As part of the 2003 comprehensive revision of the NIPAs, owner-occupied housing was reclassified to the households and institutions sector to reflect the fact that the housing in this case is produced by households for their own use and is not sold on the market.

Table 12.1 Content of Rental Income of Persons

Category of transaction	Comments
Tenant-occupied housing	Includes tenant-occupied nonfarm permanent-site housing owned by individuals and by NPISH. Includes tenant-occupied farm permanent-site housing and other structures owned by farm operator landlords. Includes land and structures owned by nonoperator farm landlords that are not primarily engaged in the production of crops or livestock. Excludes manufactured housing. Excludes expenses associated with property ownership and rental services.
Owner-occupied housing	Includes housing services provided by farm and nonfarm owner-occupied permanent-site housing and by nonfarm owner-occupied manufactured housing. Excludes expenses exclusively associated with rental services.
Nonresidential properties	Includes structures, equipment, and the rental income of private employee pension funds (imputed to persons). Excludes expenses associated with property ownership and rental services.
Royalties	Includes royalties for the provision of rights to natural resources and intellectual property.
Capital consumption adjustment	Conversion of tax-based measures of depreciation at historical cost to economic depreciation at current cost measures.

The bulk of rental income of persons (about 73 percent in 2017) is generated from the provision of housing services by households and NPISH; specifically, from owner-occupied housing (households). The remainder (about 27 percent) is generated from the provision by other private business of tenant-occupied housing, of nonresidential properties, and of rights to intellectual property and natural resources.

Table 7.9. Rental Income of Persons by Legal Form of Organization and by Type of Income

[Billions of dollars]

Line		2017
1	Rental income of persons with capital consumption adjustment	730.2
2	Other private business	199.6
3	Tenant-occupied housing	157.4
4	Nonfarm tenant-occupied permanent site housing	157.2
5	Farm tenant-occupied housing owned by farm operator landlords	0.1
6	Farms owned by nonoperator landlords ¹	9.8
7	Nonfarm nonresidential properties ²	0.4
8	Royalties	32.0
9	Households and nonprofit institutions	530.6
10	Nonfarm owner-occupied housing	515.4
11	Permanent site	504.6
12	Manufactured homes	10.8
13	Farm owner-occupied housing owned by farm operators	3.0
14	Tenant-occupied housing owned by nonprofit institutions	12.2
	Addendum:	
15	Rental income with capital consumption adjustment (1-8)	698.2

1. Includes housing, service structures, and land.

2. Includes rental income of private employee pension funds imputed to persons.

As the measure of rental income of persons includes income from nonresidential structures and from royalties, it is not an exclusive measure of the income generated by housing services. Table 7.9 also includes a measure of “rental income with capital consumption adjustment” that excludes royalty income and is therefore more conceptually aligned with the provision of tangible property; however, it includes income from the provision of structures and equipment, as well as housing. Neither is rental income of persons a comprehensive measure of the income generated by housing, as housing services are also provided by governments, by corporations, and by proprietors and partnerships. Given the importance of housing to the health of the economy, the NIPAs also provide measures that reflect the production and income of an alternative “housing” sector, of which the households and institutions sector is only a part; these measures reflect the output associated with housing—and only housing—provided by all owners.⁷ Measures of final expenditures for housing services that are consistent with the output of the housing sector are reflected in BEA’s estimates of personal consumption expenditures.

The inclusion in rental income of persons of income from tenant-occupied permanent-site housing, from nonresidential properties, and from rights to intellectual property or natural resources is straightforward; as explained in [chapter 2](#), the income approach measures GDP—or gross domestic income (GDI)—as the sum of the income

⁷ Measures for the housing sector are discussed in Mayerhauser, Nicole and Marshall Reinsdorf, “[Housing Services in the National Economic Accounts](#),” September 2007.

payments and other costs incurred in the production of goods and services, and rental income of persons reflects income payments for the production of housing and other property services. The inclusion of income from owner-occupied housing (both permanent-site and manufactured homes) in rental income of persons warrants further explanation. As noted in [chapter 2](#), purchases of newly constructed housing are treated as private fixed investment rather than as consumption expenditures in the NIPAs, and the stock of housing is treated as fixed assets. The housing stock provides a flow of housing services that are consumed by persons who rent their housing and by persons who own the housing they occupy (referred to as “owner-occupiers”). In the NIPAs, owner-occupiers are treated as owning unincorporated enterprises that provide housing services to themselves in the form of the rental value of their dwellings.⁸ Thus, personal consumption expenditures (PCE) for housing services includes both the monetary rents paid by tenants and an imputed rental value for owner-occupied dwellings (measured as the income the homeowner could have received if the house had been rented to a tenant), and rental income of persons includes the monetary income earned by landlords and an imputed rental income earned by owner-occupiers. This treatment is designed to make PCE, GDP, and the incomes associated with them invariant to whether the house is rented by a landlord to a tenant or is lived in by the homeowner.

The imputation also increases the international comparability of the NIPAs because rates of home ownership differ significantly from country to country; by including both tenant-occupied and owner-occupied housing services in output and income measures, comparisons are not affected by these differences.

It is also worth noting that as a component of income, depreciation—a cost incurred in production—is reflected in the measures of rental income, as shown in table 12.1 above. As much of the source data underlying BEA’s measures of depreciation are based on tax-accounting information, the source data must be adjusted to reflect consistent economic-accounting measures that are valued at current-replacement cost. The capital consumption adjustment (CCAdj) is a two-part adjustment that (1) converts depreciation measures that are based on a mixture of service lives and depreciation patterns specified in the tax code to measures that are based on uniform service lives and empirically based depreciation patterns; and (2) converts the measures to a current-cost basis by removing from rental income the capital-gain-like or capital-loss-like element that arises from valuing the depreciation of fixed assets using prices from earlier periods (i.e. prices at the time the asset was acquired).⁹

⁸This treatment is consistent with that of the international [System of International Accounts](#) (SNA): “Households that own the dwellings they occupy are formally treated as owners of unincorporated enterprises that produce housing services consumed by those same households” (SNA 2008: 6.117).

⁹ For information on the derivation of the CCAdj, see [Fixed Assets and Consumer Durable Goods in the United States, 1925–97](#), September 2003, available on BEA’s website at www.bea.gov.

Recording in the NIPAs

As described in [chapter 2](#), the NIPAs can be viewed as aggregations of accounts belonging to individual transactors in the economy. In the seven summary accounts of the NIPAs, “rental income of persons with capital consumption adjustment” appears as an income component in the Private Enterprise Income Account (account 2) and in the Personal Income and Outlay Account (account 3). Additionally, it is a component of national income and, as a component of net operating surplus, it is reflected in gross domestic income (GDI) in the Domestic Income and Product Account (account 1).

In the NIPAs, rental income of persons is a component of national income and is shown by sector and by legal form of organization for other private business, for households, and for NPISH. The following is a list of the principal NIPA tables that present annual and, in some cases, quarterly, current-dollar estimates of rental income of persons with capital consumption adjustment as a component of GDI and of national income.¹⁰

- 1.10 Gross Domestic Income by Type of Income (A) (Q)
- 1.11 Percentage Shares of Gross Domestic Income (A)
- 1.12 National Income by Type of Income (A) (Q)
- 1.13 National Income by Sector, Legal Form of Organization, and Type of Income (A)
- 1.16 Sources and Uses of Private Enterprise Income (A)
- 7.4.5 Housing Sector Output, Gross Housing Value Added, and Net Value Added (A)
- 7.9 Rental Income of Persons by Legal Form of Organization and by Type of Income (A)
- 7.12 Imputations in the National Income and Product Accounts (A)

BEA also prepares nominal, or “current-dollar” estimates of rental income of persons that are not seasonally adjusted; these are available in Section 8 of the NIPA Interactive Data Tables.¹¹

Overview of Source Data and Estimating Methods

As described earlier, NIPA estimates, including those for rental income of persons, are prepared using a wide variety of source data (See “[Chapter 3: Principal Source Data](#)”) and using estimating methods that adjust the source data to the required NIPA concepts and that fill in gaps in coverage and timing (see “[Chapter 4: Estimating Methods](#)”). For rental income of persons, the estimates are based on statistical surveys

¹⁰ The NIPAs also present annual and quarterly aggregate estimates of rental income of persons in NIPA table group 2 as a component of personal income. Annual and quarterly estimates of aggregate rental income of persons are available in table 2.1; quarterly and monthly estimates are available in table 2.6. BEA also prepares [state and local area](#) estimates of rental income of persons as part of its regional economic accounts.

¹¹ Go to www.bea.gov; select “Tools,” “Interactive Data,” “GDP and Personal Income,” and then “Begin using the data.”

and reports primarily from the Census Bureau, the Federal Reserve Board, the Internal Revenue Service (IRS), and the Office of Management and Budget, as well as from private organizations such as Black Knight Financial Services.¹²

Table 12.A following the main text summarizes the source data and estimating methods that are used to prepare the current-dollar benchmark, nonbenchmark, and current quarterly estimates for rental of income of persons as shown by legal form of organization and by type of income in NIPA table 7.9. The source data and methods for the current quarterly estimates reflect both seasonally adjusted and not seasonally adjusted estimates unless otherwise noted.

Benchmark year estimates

For all dwellings, rental income is equal to the rental value of the dwelling, as reflected in BEA’s measures of personal consumption expenditures (PCE) for housing services, less the expenses associated with owning the property, and plus any subsidies related to the property. (The estimates of PCE for housing services are described in detail in “[Chapter 5: Personal Consumption Expenditures](#)”). Housing-related expenses are deducted because they are considered intermediate inputs to the production of the rental services and as such, they are already reflected in the rent charged for the service. In contrast, subsidies are added because it is assumed that owners reduce the rents they charge by the value of any property-related subsidies they receive.

For *nonfarm tenant-occupied permanent site housing*, the measure of rental value reflected in PCE is based on the rent paid by tenants.¹³ The data on rental value as well as the data on expenses and subsidies described below cover all owners—that is, corporations, proprietors, and individuals. Therefore, once total expenses are deducted from, and total subsidies are added to, the rental value, a portion of total rental income is allocated to corporations, proprietors, and partnerships based on data on the percentage of rental receipts that is received by businesses from the Census Bureau’s decennial Census of Housing Residential Finance Survey. The residual is allocated to individuals (other private business) and to NPISH based on the percentage of permanent-site rental units that each provide, from the same data source.¹⁴

Expenses for nonfarm dwellings include mortgage interest paid, maintenance and repairs, property taxes, property insurance, financial costs associated with obtaining mortgages (origination fees, credit reports, and adjustment and collections services), depreciation, and other housing costs (condominium and cooperative fees, mortgage

¹² Black Knight Financial Services was formerly Lender Processing Services Applied Analytics.

¹³ The rent paid is adjusted to exclude any utility payments, as they are already accounted for elsewhere in PCE, and to include tenant expenditures for major replacements, maintenance, and repairs that are not reimbursed by the landlord owner, as they are considered part of the rental cost to the tenant.

¹⁴ The percentages have been held constant since the discontinuation of the survey in 2001.

guaranty insurance, property management fees, imputed bank service charges, advertising, pool maintenance, and “all other”).

Data on expenses come from various sources, including BEA’s benchmark input-output accounts, the Census Bureau’s censuses of governments and of housing, and the Federal Housing Finance Agency. For each type of expense, the data cover both tenant-occupied and owner-occupied housing. BEA allocates each expense between the two based on data from BEA’s benchmark input-output accounts, unpublished source data, or judgmental trends.

Subsidies are added to either tenant- or owner-occupied housing based on the nature of the subsidy. For tenant-occupied housing, the following subsidies are added:

- **Section 8:** This program provides rental assistance payments to landlords on behalf of low-income tenants. Estimates are provided by type of landlord (nonprofit, private, and state and local enterprises).
- **Section 236:** Under the Housing and Urban Development Act of 1968 (Rental Housing Assistance Program) the federal government subsidizes the monthly mortgage payment that a qualified owner of a rental or cooperative project is required to make. This subsidy reduces rents for lower income tenants
- **Rural housing service (RHS):** Under the Rental Assistance Program, the U.S. Department of Agriculture’s RHS provides assistance to tenants through the Rural Rental Housing or Farm Labor Housing projects.
- **Other housing subsidies:** Includes rental assistance and affordable housing programs provided by other public enterprises.
- **Current surplus of government enterprises:** For state and local enterprises that provide housing, net operating income is comprised of federal subsidies and rental payments received by tenants, less expenses. It is measured as the current surplus of these government enterprises.

For *nonfarm owner-occupied permanent site housing*, the PCE measure of rental value is imputed based on measures of the rental value of tenant-occupied dwellings of similar size and value. This approach assumes that owner-occupied units of similar size and value have similar rent-to-value ratios.¹⁵ For owner-occupied units, the value of utilities may be imbedded in the source data, but adjustments are not made to exclude them because reliable source data with which to do so are not available.

As noted above, the aggregate measure of each type of expense is allocated between, and then deducted from, tenant- and owner-occupied housing based on various source data; the expenses deducted from owner-occupied housing are the same as those for tenant-occupied housing with the exception of property management fees, imputed bank service charges, and advertising, which are only deducted from tenant-occupied housing. For owner-occupied housing, the following subsidies are added:

¹⁵ According to the SNA, “The ratio of owner-occupied to rented dwellings can vary significantly...so both international and inter-temporal comparisons of the production and consumption of housing services could be distorted if no imputation were made for the value of own-account housing services.” ([SNA 2008](#): 6.34).

- **Section 235:** The Housing and Urban Recovery Act of 1983 program subsidizes the interest payments of eligible homeowners for 10 years.
- **Federal Emergency Management Agency (FEMA):** FEMA provides disaster-related subsidy payments for temporary housing, repairs, mortgage and rental assistance, etc.
- **Road Home Grants:** The Road Home program was a Federal grant to the states of Louisiana and Mississippi to aid persons displaced by Hurricanes Katrina and Rita. The program, which provided subsidies for property repairs, operated from 2007 to 2018.

For *owner-occupied manufactured homes*, the PCE measure of rental value is estimated as the product of the rent per unit of tenant-occupied manufactured homes and the ratio of the average number of rooms in owner-occupied manufactured homes to those in tenant-occupied manufactured homes. The expenses deducted from this measure include “contract site rent”—the charge for the site upon which the home is located—as well as mortgage interest paid, property taxes, consumption of fixed capital, and miscellaneous other costs (including property insurance and maintenance and repairs). Subsidies are not added in the measurement of rental income from manufactured homes. As noted previously, rental income of persons does not include income from tenant-occupied manufactured homes, which is instead recorded as business income.

For *farm housing*, estimates of rental value, expenses, and subsidies are all based on data from the United States Department of Agriculture (USDA) with two exceptions. Measures for capital consumption allowances come from the IRS Statistics of Income (SOI) program, and measures of the consumption of fixed capital come from BEA’s Fixed Assets Accounts.¹⁶ For *farm tenant-occupied housing owned by farm operator landlords*, the rental value is adjusted to exclude expenses for maintenance and repairs, capital consumption allowances, real estate taxes, mortgage interest, property insurance, and the compensation paid in kind (in the form of housing) to hired labor. For *farms owned by nonoperator landlords*, (those that are not primarily engaged in the production of crops or livestock) the rental value includes the value of housing, nonresidential structures, and land, and is based on the USDA measure of agricultural net rent, which is net of expenses and includes government payments to nonoperator landlords.¹⁷ For *farm owner-occupied housing owned by farm operators*, the USDA measure of the rental value is adjusted to exclude expenses for maintenance and repairs, consumption of fixed capital, real estate taxes, mortgage interest, and property insurance. No subsidies are added.

¹⁶ The NIPAs reclassified the rental income associated with farm housing to the household and NPISH sector as part of the 2003 NIPA comprehensive revision; previously, it was recorded as part of farm proprietors’ income. For more information, see Moulton and Seskin, “[Preview of the 2003 Comprehensive Revision of the National Income and Product Accounts: Changes in Definitions and Classifications](#),” *Survey* 83 (June 2003). The USDA continues to include the output of farm housing services as part of the farm sector in its farm income measures.

¹⁷ For farms that are primarily engaged in production of crops or livestock, rental income is included in farm proprietors’ income.

For *tenant-occupied housing owned by nonprofit institutions*, the measure of the rental value is derived and allocated between individuals and NPISH as described above. Deducted expenses include property taxes, mortgage interest, depreciation, property insurance, maintenance and repairs, and administrative expenses.

For *nonfarm nonresidential properties*, rental income is estimated by multiplying BEA's measures of the nonfarm nonresidential capital stock of structures and equipment owned by persons by an estimated rate of return on these assets. The rate of return on these assets is estimated by dividing the profits of corporate real estate operators and lessors of buildings, based on SOI data, by the value of their depreciable assets, also based on SOI data. The rental income of private employee pension funds imputed to persons is added to the total measure, based on data from the Federal Reserve Board.

For *royalty income* from intellectual property and from the rights to natural resources, rental income is equal to the net royalties received by individuals, by fiduciaries, and by nonprofit organizations less the expense of bonus payments for drilling rights for what are ultimately found to be "dry holes." Data are primarily from the IRS SOI program.

Nonbenchmark annual estimates

Estimates for nonbenchmark years are generally prepared at the same level of detail as those for benchmark years. Nonbenchmark annual estimates of the rental value reflected in PCE for all nonfarm housing are extrapolated from the benchmark values as described in [chapter 5](#); nonbenchmark annual estimates of expenses and subsidies are extrapolated based on various source data or by judgmental trend, as described in table 12.A.

For farm housing, annual measures are derived using the same source data and methodologies as the benchmark estimates.

For nonresidential structures and for royalty income, annual measures are derived using the same source data and methodologies as the benchmark estimates.

Current quarterly estimates

The seasonally adjusted quarterly current-dollar estimates of the rental values reflected in PCE for all housing are prepared by reflating the estimates of real PCE for each type of dwelling using the CPI for rent of primary residence for tenant-occupied dwellings and the CPI for owners- equivalent rent of primary residence for owner-

occupied dwellings.¹⁸ For expenses and subsidies, quarterly values are extrapolated based on various source data or by judgmental trend, as described in table 12A. For nonresidential structures and for royalty income, current quarterly estimates are primarily derived by judgmental trend.

The not seasonally adjusted current quarterly estimates of rental income of persons are derived using the same methods as the seasonally adjusted current quarterly estimates, using the not seasonally adjusted versions of the same indicators.

¹⁸ As a component of the product-side measure of personal consumption expenditures, BEA prepares real (inflation-adjusted) measures of personal consumption expenditures for housing services; most income measures, including rental income of persons, are not adjusted for inflation. For more information on the derivation of inflation-adjusted measures, see “Price and Quantity Estimates in [chapter 4](#) of this handbook. For more information on the derivation of real consumption expenditures for housing services, see “Quantity and price estimates” in chapter 5.

CHAPTER 12: RENTAL INCOME OF PERSONS

Table 12.A—Summary of Methodology Used to Prepare Rental Income of Persons				
Line in NIPA table 7.9	Component	Benchmark year	Nonbenchmark year	Current quarterly estimates
			Indicator series used to interpolate and extrapolate*	
2	Other private business			
3	Tenant-occupied housing			
4	Nonfarm tenant-occupied permanent site housing	<p>Rental value of tenant-occupied nonfarm housing less expenses and plus subsidies. <u>Rental value of tenant-occupied nonfarm housing:</u> Unit stocks and average rent based on Census Bureau COH. <u>Expenses:</u> Allocated portion of aggregate of unpublished measures: (1) Maintenance and repairs: 1997 benchmark I-O-based value extrapolated based on National Association of Realtors existing home sales forecasts. (2) Mortgage interest paid: 2009 value based on Residential Finance Survey (RFS) extrapolated based on FRB mortgage debt outstanding, effective rate of interest from Black Knight Financial Services, and BEA adjustments to include discount points based on FHFA data. (3) Property insurance: Direct premiums earned, investment income of policyholder reserves, and normal losses from AM Best. (4) Property taxes: Real estate taxes by size of housing unit from Census Bureau Census of Governments and RFS and unit stocks based on COH. (5) Financial costs: Rates of initial fees and charges from Federal Housing Finance Agency (FHFA), multiplied by mortgage originations from Freddie Mac. (6) Property management fees: benchmark I-O tables. (7) Consumption of fixed capital: IRS tabulations of capital consumption allowances and BEA's capital consumption adjustment estimates. (8) All other housing expenses: BEA's benchmark I-O tables. <u>Subsidies:</u> Aggregate of unpublished detail from</p>	<p>Rental value of tenant-occupied nonfarm housing, less expenses and plus subsidies. <u>Rental value of tenant-occupied nonfarm housing:</u> Unit stocks based on Census Bureau biennial AHS or on Census Bureau Current Population Survey; average rent based on AHS data or extrapolated based on CPI for rent of primary residence. <u>Expenses:</u> Tenant-occupied portion of aggregate of unpublished extrapolated measures: (1) Maintenance and repairs: same as benchmark year. (2) Mortgage interest paid: same as benchmark year. (3) Property insurance: same as benchmark year. (4) Property taxes: Growth rate in state and local tax collections from Census Bureau's quinquennial Census of Government and Annual Survey of State and Local Government Finances. (5) Financial costs: same as benchmark year. (6) Property management fees: same as benchmark year. (7) Consumption of fixed capital: same as benchmark year. (8) All other housing expenses: trade association data and judgmental trends. <u>Subsidies:</u> same as benchmark year.</p>	<p>Rental value of tenant-occupied nonfarm housing, less expenses and plus subsidies. <u>Rental value of tenant-occupied nonfarm housing:</u> For unit stocks, Census Bureau data on new privately-owned housing units completed. For average rent, CPI for rent of primary residence. <u>Expenses:</u> For mortgage interest paid, quarterly mortgage debt outstanding from FRB and monthly mortgage servicing data from Black Knight Financial Services. For financial costs, initial fees and charges from FHFA and mortgage originations from Freddie Mac and moving average of number of loan applications from Mortgage Bankers Association. For all other expenses, judgmental trend. <u>Subsidies:</u> Judgmental trend.</p>

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Table 12.A—Summary of Methodology Used to Prepare Rental Income of Persons				
Line in NIPA table 7.9	Component	Benchmark year	Nonbenchmark year	Current quarterly estimates
			Indicator series used to interpolate and extrapolate*	
		BEA's Federal Budget Translation, and unpublished NIPA detail on current surplus of government enterprises.		
5	Farm tenant-occupied housing owned by farm operator landlords	Gross rental value based on USDA data, less expenses (including property insurance, property taxes, mortgage interest, maintenance and repairs, and provision of housing as compensation in kind to hired labor), based on USDA data and less BEA data for consumption of fixed capital.	Same as benchmark year.	Judgmental trend.
6	Farms owned by nonoperator landlords	Net rent (excluding expenses and including government payments) based on USDA data.	Same as benchmark year.	Judgmental trend.
7	Nonfarm nonresidential properties	Sum of rental income from nonfarm nonresidential structures and equipment and rental income of private employee pension funds imputed to persons. For rental income from nonfarm nonresidential structures and equipment, gross stock from BEA's Fixed Assets Accounts multiplied by the rate of return to corporate real estate assets based on SOI data. For rental income from private employee pension funds imputed to persons, IRS tabulations of Form 5500 data on rental income from properties for 1984 extrapolated using FRB data on growth in miscellaneous assets of pension plans. Capital consumption allowances and capital consumption adjustment from BEA's Fixed Asset Accounts.	Same as benchmark year.	Judgmental trend.
8	Royalties	Net royalty of individuals less oil bonus payments. <u>Net royalty income of individuals</u> : Net royalties of fiduciaries from SOI plus judgmentally determined royalty income of nonprofit organizations. <u>Oil bonus payments</u> : Judgmentally determined based on SOI data on intangible drilling costs.	For years in which SOI data is available, same as benchmark year. For most recent year, extrapolated based on Industry account estimates of gross output of oil and gas extraction industries (NAICS 211).	Product of BLS producer price index for oil and gas extraction and FRB industrial production index for oil and gas extraction.
9	Households and nonprofit institutions			

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Line in NIPA table 7.9	Component	Benchmark year	Nonbenchmark year	Current quarterly estimates
			Indicator series used to interpolate and extrapolate*	
10	Nonfarm owner-occupied housing			
11	Permanent site	<p>Imputed rental value of owner-occupied nonfarm permanent-site housing, less expenses and plus subsidies.</p> <p><u>Imputed rental value of owner-occupied nonfarm housing</u>: Units stocks based on COH; average annual rent based on RFS.</p> <p><u>Expenses</u>: Same as for nonfarm tenant-occupied permanent-site housing (excluding property management fees, imputed bank service charges, and advertising); for consumption of fixed capital, BEA's Fixed Assets Accounts.</p> <p><u>Subsidies</u>: Aggregate of unpublished detail from BEA's Federal Budget Translation.</p>	<p>Imputed rental value of owner-occupied nonfarm housing, less expenses and plus subsidies.</p> <p><u>Imputed rental value of owner-occupied nonfarm housing</u>: Unit stocks from AHS or Census Bureau Current Population Survey. Average rent extrapolated based on CPI for owners' equivalent rent.</p> <p><u>Expenses</u>: Same as benchmark year.</p> <p><u>Subsidies</u>: Same as benchmark year.</p>	<p>Imputed rental value of owner-occupied nonfarm housing, less expenses and plus subsidies.</p> <p><u>Imputed rental value of owner-occupied nonfarm housing</u>: Unit stocks from Census Bureau data on housing completions; average rent same as for nonbenchmark years.</p> <p><u>Expenses</u>: same as for nonfarm tenant-occupied permanent site.</p> <p><u>Subsidies</u>: Judgmental trend.</p>
12	Manufactured homes	<p>Imputed rental value of owner-occupied nonfarm manufactured housing, less expenses and plus subsidies.</p> <p><u>Imputed rental value of owner-occupied manufactured homes</u>: Product of rent per unit of tenant-occupied units and the ratio of the average number of rooms in owner-occupied units to those in tenant-occupied units based on COH data.</p> <p><u>Expenses</u>: Aggregate of unpublished measures:</p> <p>(1) Contract site rent: Historical value extrapolated by the rate of change in gross rent from COH.</p> <p>(2) Mortgage interest paid: Mortgage debt outstanding extrapolated using growth rate in sales of manufactured homes from Census Bureau Manufactured Housing Survey; effective rate of interest extrapolated using growth rate in FRB blended rate for manufactured homes.</p> <p>(3) Property taxes: 2001 RFS-based value extrapolated using growth rate in rental value of owner- and tenant-occupied manufactured homes.</p> <p>(3) Consumption of fixed capital: BEA's Fixed Asset</p>	<p>Imputed rental value of owner-occupied nonfarm housing, less expenses and plus subsidies.</p> <p><u>Imputed rental value</u>: Extrapolated based on median rent from AHS or on CPI for owners' equivalent rent of primary residence.</p> <p><u>Expenses</u>: Aggregate of unpublished measures:</p> <p>(1) Contract site rent: same as benchmark year.</p> <p>(2) Mortgage interest paid: same as benchmark year.</p> <p>(3) Property taxes: same as benchmark year.</p> <p>(4) Consumption of fixed capital: same as benchmark year.</p> <p>(5) Miscellaneous costs: extrapolated using the growth rate in the rental value of owner-occupied manufactured homes less contract site rent.</p>	<p><u>Imputed rental value</u>: For unit stocks, new shipments of manufactured homes from Census Bureau. For average rent, CPI for owners' equivalent rent of primary residence.</p> <p><u>Expenses</u>: Judgmental trend.</p>

CHAPTER 12: RENTAL INCOME OF PERSONS

Table 12.A—Summary of Methodology Used to Prepare Rental Income of Persons				
Line in NIPA table 7.9	Component	Benchmark year	Nonbenchmark year	Current quarterly estimates
			Indicator series used to interpolate and extrapolate*	
		Accounts. (4) Miscellaneous costs: BEA's Input-Output Accounts.		
13	Farm owner-occupied housing owned by farm operators	Same as farm tenant-occupied farm housing.	Same as farm tenant-occupied farm housing.	Same as farm tenant-occupied farm housing.
14	Tenant-occupied housing owned by nonprofit institutions	Allocated portion of rental value of tenant-occupied housing less allocated portion of expenses and plus allocated portion of subsidies.	Same as benchmark year.	Judgmental trend.

* The description "Same as for benchmark year" indicates that the estimate is prepared using a methodology similar to that used for the benchmark estimate rather than by using an indicator series to interpolate or extrapolate the benchmark estimate.

AHS: American Housing Survey, Census Bureau

AHS: American Housing Survey, Census Bureau

BLS: Bureau of Labor Statistics

COH: Decennial Census of Housing--average rent for tenant occupied

CPI: Consumer Price Index, Census Bureau

FRB: Federal Reserve Board

FHFA: Federal Housing Finance Agency

I-O: Input-Output

IRS: Internal Revenue Service

RFS: Decennial Census of Housing, Residential Finance Survey—discontinued in 2001