“Notice on Usage” of Annual Report on National Accounts of Japan


Annual Report for FY 2004, please click here.
Annual Revision for FY2005
and the Retroactive Revision from 1996 of National Accounts
Notice on Usage


2. In the compilation of national accounts for the most recent year, estimates for the previous year are revised to reflect source data that have become available after the estimation for the previous year. For the annual revision for FY 2005, figures for 2004 and 2005 were estimated as usual.

3. In addition to the usual revision, the figures from 1996 to 2003 were retroactively revised.
   (Note 1) For the expenditure series, the figures are retroactively revised from 1994, so users must be careful about the consistency between the expenditure series and the production series (which were revised from 1996).
   (Note 2) The weights used in the estimation of the basic unit deflators for 400-goods-and-services before 2000 were revised to the 2000 benchmark weights.

4. Major Changes in Compilation Methods
   In addition to the incorporation of newly available source data, some compilation methods were modified, as stated below.

< For Production and Expenditure Series >

(1) Modification of the estimation method of trade and transport margins for changes in inventories for wholesale and retail trade

To estimate the changes in inventories for wholesale and retail trade in consumer prices, trade and transport margins must be added. Negative trade and transport margins occurred when the changes in inventories for wholesale and retail trade were negative. From this time, trade and transport margins were recorded as non-negative values in such cases.

(2) Modification of the estimation method for changes in inventories for wholesale and retail trade

The rate of changes in inventories to traded volume—which is used to estimate
changes in inventories for wholesale and retail trade—is estimated based on the stock of inventories (commodity stocks) and sales turnover recorded in the most recent Census of Commerce, extrapolated by the Current Survey of Commerce. Because the Current Survey of Commerce covers only large-scale stores, the regression-based estimation of changes in inventories of corporations with capitalizations of more than 10 million yen according to the “Financial Statements Statistics of Corporations” of the commodity stocks in the Current Survey of Commerce was used for the figures from 2000.

We examined how the above-mentioned method fits the Census of Commerce well; it turned out that the figures of large-scale stores in the Current Survey of Commerce reflect movement as a whole better than the above-mentioned method does. So the extrapolated figures using the Current Survey of Commerce will be used retroactively from 2000.

(3) Modification of the estimation method for the inventory valuation adjustment for the LIFO in the year 2000

The inventory valuation adjustment for the LIFO uses price data from the proceeding two years. In the benchmark revision last year, the adjustment of the year 2000 had been done with data only from 1999 and 2000. This time, the normal method was used.

(4) Modification of the estimation method of trade and transport margins for publishing and printing industries

To estimate the purchaser’s price, trade and transport margins must be added. In light of the 2000 I-O Table, we examined the trade and transport margins for the publishing and printing industries. The trade and transport margins for those industries are retroactively revised from the benchmark year 2000.

(5) Modification of the estimation method for value added between 1996 and 1999

In the benchmark revision last year, the value added by industry between 1996 and 1999 was directly estimated by interpolating the value added of the year 1995 and 2000. This time, these figures were estimated by interpolating the ratio of value added to the production of the years 1995 and 2000.
(6) Modification of the estimation method of basic unit deflators

When the basic unit deflators for 400-goods-and-services are made from 2000-goods-and-services price indicators, the Passche method was used for the goods and services, for which multiple detailed goods and services are included. This time, the chained-Fisher method was used instead.

(7) Improvement of the estimation method of “gross rent” in the 87-purpose classification of domestic final consumption expenditure of households

To estimate “gross rent,” we use as the benchmark the area of floor space and the rent by type of construction material, which are calculated from the “Housing and Land Survey (Ministry of Internal Affairs and Communications)” by type (area, construction material, year of construction). And we estimate forward “rent for rented dwellings” and “imputed service of owner-occupied dwellings” by using “Building Construction Started” (Ministry of Land, Infrastructure and Transport), “Consumer Price Index” (Ministry of Internal Affairs and Communications), etc.

In the benchmark revision last year, we conducted the estimation by using the newly (March 2005) published “Housing and Land Survey” as the benchmark. This time, we improved the estimation logic, and the figures from 2004 were revised.

(8) Detailed presentation of some items related to expenditure approach

The presentation of tables related to expenditure approach in quarterly estimates was detailed from the Secondly Preliminary for July-September 2006. The same detailed presentation was introduced.

To be more precise, goods and services at constant prices were separately presented for the import and export of the goods and services. (Supporting Table 20 in the Flow Section already presents the goods and services separately at current prices.)

Gross Domestic Capital Formation classified by type was newly presented on the basis of the modified-gross method, by which quantity was valued with prices excluding consumer taxes and excluding deductible ones. (On the basis of the gross method, Table 15 in the Flow Section already presents the Gross Domestic Capital Formation by type.)
< For Distribution Series >

(9) Improvement of the estimation method of the interest payable of the general government and public corporations

The figures of interest payable of the general government and public corporations, through the special account for government bonds consolidation fund, were retroactively revised by using new basic data.

< For Capital Accounts and Stocks >

(10) Change of estimation method with the privatization of four public corporations related to highways

In October 2005, the four public corporations related to highways (*1) were privatized.

Transfers of assets or liabilities from the four public corporations to the “Expressway Companies” (*2) (classified as public non-financial corporations), and the “Agency” (*3) (classified as general government) are recorded as capital transfers in the capital procurement account. This affects, as the purchases of land, the primary balance of the general government in 2005 (about 8 trillion yen).

In the legal sense of the word, highway assets are held by the “Agency.”

In the SNA, the economic situation is emphasized and they are attributed to “Expressway Companies.” On the other hand, the “Agency” holds financial assets, whose value is the same as the highway assets. “Expressway Companies” have the liability for the debt.

The values of the land assets under roads held by the old four public corporations and the “Expressway Companies” were retroactively estimated on the same concepts.

(*1) Japan Highway Public Corporation, Metropolitan Expressway Public Corporation, Hanshin Expressway Public Corporation and Honshu-Shikoku Bridge Authority. They were classified as public non-financial corporations.
(*3) Japan Expressway Holding and Debt Repayment Agency
(11) Inventories in Non-financial Assets

In the reconciliation accounts, the estimation methods to allocate the nominal holding gains/losses of inventories by type and by institutional sectors were improved.

(12) Reflection of the Retroactive Revision of the Flow of Funds Statistics

The figures of the financial accounts were revised backward, reflecting the retroactive revision of the Flow of Funds Statistics in March 2006.

(13) Recording of the Return of the Public Part of Pension Reserves from Employee Pension Funds to the Government (so-called “Daiko Henjo”)

Since 2003, transactions have taken place in which employee pension funds return the public part of pension reserves to the Welfare Insurances Special Account of the state. These transactions are treated as capital transfers from employee pension funds (private financial corporations) to the Welfare Insurances Special Account of the state (social security fund).

The amounts of capital transfers concerning these transactions are as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount (billion yen)</th>
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<tbody>
<tr>
<td>FY 2003</td>
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<tr>
<td>FY 2005</td>
<td>3,456.8</td>
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(14) Estimation of inward direct investment and reinvestment to financial corporations in Japan

Because the Bank of Japan began publishing its “Industrial/Regional Breakdowns of Direct Investment” from 2005, inward direct investment in Japan by industry has become clearer. Inward direct investment to the finance and insurance industries in Japan, which had been recorded on non-financial corporations, will be recorded on financial corporations from now on.

Similarly, as the Bank of Japan starts publishing “Direct Investment Position by Region and Industry” from 2005, the reinvestment related to inward direct investment to financial corporations in Japan—which had been also recorded on non-financial corporations—would be recorded on financial corporations from this time, using the volume ratio for the finance and insurance industries.
Annual Revision for FY 2004 and
the 2000 Benchmark Revision of National Accounts

Notice on Usage


2. In the compilation of national accounts for the most recent year, estimates for the previous year are revised to reflect source data that have become available after the estimation for the previous year. In addition, every five years—the period of time when basic source data such as the Input-Output Tables become available—the benchmark year (whose figures serve as the benchmark of nominal estimates) is moved. This is known as a benchmark revision.

   In the 2000 Benchmark Revision of National Accounts, nominal estimates for 2000 were re-calculated as the new benchmark on the basis of the 2000 Input-Output Tables and other statistics. The 2000 Benchmark Revision also incorporated other source data that had not yet been utilized in the annual revision thus far, and retroactively revised source data such as the 2003 Housing and Land Survey. The Annual Revision for FY 2004 has been conducted based on the results of the 2000 Benchmark Revision.

3. In the 2000 Benchmark Revision, estimates for 1996 and thereafter (from 1994 for expenditure series) were re-calculated.

   Stocks are calculated by adding the relevant flows—the 1995 benchmark figures for the period up to 1995 and the 2000 benchmark figures for the period from 1996 onward—to the benchmark stocks for 1970.

   (Note 1) For the period up to 1995, when estimates for the relevant flows were not revised, estimates for stocks differ from the previously published ones on the 1995 benchmark because the level of inflators for the period was adjusted as a result of linking inflators to different bases.

4. Major Changes in Compilation Methods

   In addition to the incorporation of newly available source data, some compilation methods were modified, as stated below.

   < For Production and Expenditure Series >
(1) Application of the Chain-linking Method to the Compilation of Real-term Production Series

The chain-linking method, which had already been applied to the calculation of real GDP (expenditure approach) and its components since December 2004, are also applied to the compilation of production series in real terms (Table 3 for Main Time Series and Supporting Table 2 in Part 1 Flow). The chained indexes for real-term estimates are Laspeyres volume indexes based on previous calendar years and those for deflators are Paasche price indexes based on previous calendar years. The reference year—the year when deflators are 100—is CY 2000. The double deflation method—a method for calculating real-term value added by subtracting real-term intermediate input from real-term output—is used as before (see Note 2).

Moreover, real-term production series calculated with the previously used fixed-based method are published.

(Note 2) Real-term values at prices in previous calendar years, which have additive consistency, are added or subtracted in the process of calculating real-term estimates.

(2) Modification of the Estimation Method for the Output of Computer Software, and Recording Acquisitions of Pre-packaged Computer Software as GFCF

To improve the accuracy of estimates for the output of computer software (see Note 3), the estimation method was modified to make calculations by type of software—customized software or “off the shelf”—and by sub-category of off-the-shelf software—software for business use, computer game software, and others.

Among these types of computer software, acquisitions of only customized software had previously been recorded as gross fixed capital formation (GFCF). Portions of acquisitions of off-the-shelf software are now recorded as GFCF (see Note 4) and are added to the closing stock of intangible fixed assets.

(Note 3) Computer software can be classified as follows. Among them, transactions of own account software are currently not estimated due to the limitation of source data.

• Customized software—custom-made software ordered from outside producers
• Off-the-shelf software—ready-made software generally purchased on the market
• Own account software—software produced in-house

(Note 4) The domestic demand for computer game software is allocated to household final consumption expenditure and not to GFCF.

(3) Modification of the Estimation Method for Imputed Rent

The estimation method for “imputed service of owner-occupied dwellings” was modified to reflect differences in qualities and environmental factors between
owner-occupied dwellings and rented ones. Specifically, for the benchmark years of 1998, 2003, and others, a direct extrapolation method is adopted in which rent for rented dwellings of equivalent quality is directly applied to owner-occupied ones. Qualities taken into account are location (by prefecture), type of structure (wooden or of other materials), and time of construction (by seven periods).


For consumption of social fixed capital such as roads, dams, and other infrastructure, the estimation method for figures in flow accounts was modified, following recommendations in the 1993 SNA, to make them consistent with those in stock accounts. Previously, nominal fixed investment as the basis of the estimation of consumption of fixed capital (CFC) in flow accounts had been valued at historic costs (on a book value basis). In the new method, time series data for nominal fixed investment at replacement costs (on a current price basis)—which are calculated in the compilation of stock accounts by multiplying nominal fixed investment at historic costs by percentage changes in prices to date—are used.

(5) Modification of the Estimation Method for the Output of Life Insurance Services

The output of life insurance services is given by the following. In the Annual Revision of National Accounts for FY 2002, the estimation method for the output of private life insurance companies had been modified as described below. In this year’s revision, the concept of the modified method is applied retroactively and to the output of other life insurance companies.

Value of the Output
= Total premiums earned
- Total claims due
+ Net profits earned on the investment of property
- Net increase of reserves

a) Net profits earned on the investment of property (= “profits earned on the investment of property” - “policyholder dividends”)

Instead of the “total policyholder dividends,” “policyholder dividends derived from the profits earned on the investment of property” were applied as “policyholder dividends.”

b) Net increase of reserves

“Net increase of reserves for policyholder dividends,” which is an item of the
appropriation of earnings, was excluded from the calculation of “net increase of reserves.”

< For Distribution Series >

(6) Modification of the Estimation Method for Long-term Care Insurance

Total benefits from long-term care insurance had previously been recorded as “other social security benefits in kind.” Among them, benefits for high-cost care services and care instruments are now recorded as “social security benefits, reimbursements (see Note 5),” and benefits for housing repairs as “social benefits other than social transfers in kind.”

(Note 5) “Social security benefits, reimbursements” are reimbursements by social security funds of all or part of expenditures made by households on services received.

(7) Modification of the Estimation Method for the Special Premiums on the Health Insurance Managed by the Government

Since the special premiums on the health insurance managed by the government include state contributions—current transfers from the central government to the social security funds—which should be excluded from “social contributions,” the treatment of the special premiums was changed to exclude state contributions from “social contributions” for the period from FY 1996 through FY 2000. For the period from FY 2001 onward, they had already been treated as such. The special premiums were lifted in FY 2003.

(8) Recording the Adjustment Premiums on Health Insurance Managed by Corporate Health Insurance Entities

To maintain consistency with the treatment of other health insurance systems, the treatment of the adjustment premiums (see Note 6) on health insurance managed by corporate health insurance entities was changed retroactively for the period from FY 1996 through FY 2001 and they are now recorded as social security contributions. For the period from FY 2002 onward, they had already been recorded as such.

(Note 6) The adjustment premiums are collected by each corporate health insurance entity and contributed to the National Federation of Health Insurance Societies as a source of revenue for the works subsidized by the Federation. In principle, they are charged equally to employers and employees.
For non-financial corporations, the values of land assets are calculated at each municipality by multiplying average land prices and the total area of owned land together. Since average land prices fluctuate sharply under the influence of mergers of municipalities, the calculation of average land prices was adjusted to reflect actual conditions.

For the general government, the values of state-owned land assets are calculated based on the revaluated register of national property for 1995 and 2000, and interpolated or extrapolated using the index of urban land price. In this year’s revision, the extrapolation for 2001 and thereafter is conducted using not only the index of urban land price but also the register of national property for 2003.

The Bank of Japan retroactively revised the Flow of Funds Statistics in March 2005. Reflecting these revisions, financial accounts were revised backward.

Since 2003, transactions have taken place in which employee pension funds return the public part of pension reserves to the Welfare Insurances Special Account of the state. These transactions are treated as capital transfers from employee pension funds (private financial corporations) to the Welfare Insurances Special Account of the state (social security fund).

The amounts of capital transfers concerning these transactions are as follows:

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Unquoted shares are valued based on data available from enterprises in comparable industries, using the same method used in calculating inheritance taxes in Japan. They had previously been valued for all industries in block, and are now valued for each industry. In addition, the calculation was modified for 2000 and thereafter, reflecting the revision of the method for calculating inheritance taxes in FY 2000.

Shares owned by the central government and public financial and non-financial
corporations, which had previously been valuated on a book-value basis, are now valuated at market prices.

Incoming direct investments (equity capital) to unlisted enterprises are newly recorded.

< For Others >

(13) Revision to Supporting Table 6 in Part 1 Flow (Account Classified by the Sub-sectors of General Government) and Related Tables

The following items were revised back to FY 1996:

- State contributions for medical expenditures for the elderly—duplicated records of the flows from the central government to the local government were corrected.
- Redemption of central government securities transferred from the JNR Settlement Corporation—capital transfers from the central government to industries were corrected for FY 2003.
- Partial write-off of the debt of the Honshu-Shikoku Bridge Authority—which is newly recorded as capital transfers from the central government to industries for FY 2003.
- Reduction of the government subscription to the Japan Finance Corporation for Small and Medium Enterprise (credit insurance branch of the former Japan Small and Medium Enterprise Corporation)—which is newly recorded as capital transfers from the central government to industries for the period from FY 1999 through FY 2003.
- Capital transfers from the central government to the local government and residents—capital transfers from the central government to the local government had previously included capital transfers to public corporations, which are now recorded correctly as capital transfers to residents.

(14) Modification of the Presentation and Estimation Method for Hours Worked

Average hours worked per employee—which had previously been presented by industry based on the Japan Standard Industrial Classification—are now presented by economic activity commonly used in national accounts for gross domestic product, numbers of the employed including and excluding the self-employed, among other items.

The series had been calculated by regrouping data for average hours worked per person by industry, which are available from the Monthly Labor Survey, using numbers of regular workers by industry as weights for regrouping. In this year’s revision, the
method for regrouping was modified to better reflect information on multiple job holders and hours worked by paid family workers for each industry since, in national accounts, multiple job holders are counted as the employed both in the main job and side jobs, and paid family workers are included in employees.

(15) Classification of Government-related Institutions by Institutional Sector

Classification of government-related institutions by institutional sector was revised as shown in the attached table, reflecting the integration and other re-organizations that took place in FY 2004.

5. Change in the Names of Items

(1) Gross Domestic Product

In Japan’s national accounts, gross domestic product from the expenditure (demand) side had conventionally been called “gross domestic expenditure.” It, however, includes exports, which are external demand for domestic goods and services, and excludes imports, which are domestic demand for foreign goods and services. That is, gross domestic product from the expenditure side means expenditures on gross domestic product. Therefore, to better represent its concept, it is now called “gross domestic product (expenditure approach).”

To be consistent with it, gross domestic product from the production side is called “gross domestic product (production approach).”

(2) Net Lending (+) / Net Borrowing (-)

In Japan’s national accounts, the balancing item of non-financial transactions in the capital finance accounts had conventionally been called “net lending (+) / net borrowing (-) (balance of saving and investment).” This item, however, includes capital transfers that are not included in the general concept of the balance of savings and investments. Therefore, to better represent the concept of the item, it is now called “net lending (+) / net borrowing (-).” Also in the 1993 SNA, this item is called “net lending (+) / net borrowing (-).

In Supporting Table 6 of Part 1 Flow (Account Classified by the Sub-sectors of General Government), “primary balance” (= “net lending (+) / net borrowing (-)” + “interest, payable” - “interest, receivable”) is newly presented.