

Compilation Method of Japan's Flow of Funds Accounts

**Research and Statistics Department
Bank of Japan**

Introduction

The Bank of Japan has been compiling the Flow of Funds Accounts Statistics (the FFA) since 1958, covering the data from 1954. The FFA is released quarterly: preliminary data is released about three months later, and final data about six months later. In principle, the FFA is revised retroactively every March.

The FFA is a matrix showing financial transactions and corresponding stock data on financial claims and liabilities among various economic entities. It records movements of financial assets and liabilities among institutional units called sectors, such as financial institutions, corporations and households. Being extremely detailed and having wide coverage, the FFA is very useful, but on the other hand, it sometimes adopts unique principles and concepts, and has original definition of sectors and transactions items. In addition, data series exceed 7,000 series in total and as such, frequently depend upon estimation. It is also necessary to revise compilation methods to reflect changes in financial structure and to maintain accuracy. Therefore, in using the FFA, it is necessary to understand accurately its feature. With a view to fulfilling users' needs, the Research and Statistics Department published a booklet that offers detailed explanations on the estimation method for each sector and transaction item. We have revised the booklet to reflect the changes in compilation methods. This booklet is based on the information as of the end of September 2005.

The booklet is comprised of the following chapters. The first chapter overviews the compilation method of the FFA and matters to be taken into consideration. Chapters two and three explain estimation method for sectors and transaction items respectively. Chapter three also gives further explanation on the accuracy of estimation and its relationship with other statistics for each released figure.

Throughout this booklet, explanations have been made to be read independently for each item so that the users could use the booklet as a dictionary when using the statistics.

The booklet focuses on the estimation method of each figure in the FFA, and therefore, explanation has not been made for overall concept and thinking behind the FFA, nor the definition of individual sector or item. For such purposes, please refer to "Guide to Japan's Flow of Funds Accounts."

Contact Address:
Financial Statistics Group,
Economic Statistics Division,
Research and Statistics Department
Bank of Japan (post.rsd5@boj.or.jp)

Contents

	Page
Chapter 1. Outline of Compilation Method and Remarks.....	1- 1
1. "Vertical approach" and "horizontal approach"	1- 1
2. Remarks for "vertical approach"	1- 2
3. Remarks for "horizontal approach"	1- 3
4. Accuracy of estimates of the FFA	1- 4
 Chapter 2. Estimation Methods of Sectors.....	 2- 1
*For the definition of each sector, please refer to “Guide to Japan’s Flow of Funds Accounts,” Chapter 3.	
1. Financial institutions.....	2- 1
1-1. Central bank.....	2- 1
1-2. Depository corporations.....	2- 2
1-2-1. Banks.....	2- 2
1-2-1-1. Domestically licensed banks.....	2- 2
1-2-1-2. Foreign banks in Japan.....	2- 8
1-2-1-3. Financial institutions for agriculture, forestry, and fisheries.....	2-10
1-2-1-4. Financial institutions for small businesses.....	2-13
1-2-2. Postal savings.....	2-17
1-2-3. Collectively managed trusts.....	2-19
1-3. Insurance and pension funds.....	2-20
1-3-1. Insurance.....	2-20
1-3-1-1. Life insurance.....	2-20
1-3-1-1-1. Private life insurance companies.....	2-21
1-3-1-1-2. Postal life insurance.....	2-25
1-3-1-2. Nonlife insurance.....	2-27
1-3-1-2-1. Private nonlife insurance companies.....	2-27
1-3-1-2-2. Other nonlife insurance.....	2-30
1-3-1-3. Mutual aid insurance.....	2-31
1-3-2. Pension funds.....	2-33
1-3-2-1. Corporate pensions.....	2-33
1-3-2-2. Other pensions.....	2-36
1-4. Other financial intermediaries.....	2-39
1-4-1. Securities investment trusts.....	2-39
1-4-1-1. 2. Bond investment trusts (including MMF and MRF) and stock investment trusts.....	2-39
1-4-2. Nonbanks.....	2-41
1-4-2-1. Finance companies.....	2-41
1-4-2-2. Structured-financing special purpose companies (SPCs) and trusts.....	2-44
1-4-3. Public financial institutions.....	2-45
1-4-3-1. Fiscal Loan Fund.....	2-45
1-4-3-2. Government financial institutions.....	2-46
1-4-4. Financial dealers and brokers.....	2-48
1-4-4-1. Securities companies.....	2-48
1-4-4-2. <i>Tanshi</i> companies (money market dealers) etc	2-51
1-5. Financial auxiliaries (financial institutions other than intermediaries)	2-51
2. Nonfinancial corporations.....	2-52
2-1. Private nonfinancial corporations.....	2-53
2-2. Public nonfinancial corporations.....	2-56
3. General government.....	2-58
3-1. Central government.....	2-59

	Page
3-2. Local governments.....	2-61
3-3. Social security funds.....	2-63
3-3-1. Public pensions.....	2-63
3-3-2. Other social security funds.....	2-66
4. Households.....	2-66
5. Private Nonprofit Institutions Serving Households (NPISH).....	2-71
6. Overseas.....	2-74

Chapter 3. Estimation Methods of Transaction Items and Remarks..... 3- 1

*For the definition of each item, please refer to “Guide to Japan’s Flow of Funds Accounts,” Chapter 4.

A. Currency and deposits.....	3- 1
A-a. Currency.....	3- 1
A-b. Deposits with the Bank of Japan.....	3- 1
A-c. Government deposits.....	3- 2
A-d. e. g. Transferable deposits, time and savings deposits, and foreign currency deposits.....	3- 2
A-f. Certificates of deposit.....	3- 4
B. Deposits with the Fiscal Loan Fund.....	3- 5
C. Loans.....	3- 6
C-a. Bank of Japan loans.....	3- 8
C-b. c. Call loans and money, and bills purchased and sold.....	3- 8
C-d. Loans by private financial institutions.....	3- 9
C-d-c. Loans to companies and governments.....	3- 9
C-d-a. b. Housing loans and consumer credit (breakdown of loans by private financial institutions).....	3-12
C-e. Loans by public financial institutions.....	3-12
C-e-a. Of which: housing loans (breakdown of "Loans by public financial institutions").....	3-14
C-f. Loans by the nonfinancial sector.....	3-14
C-g. Installment credit.....	3-15
C-h. Repurchase agreements and securities lending transactions.....	3-15
D. Securities other than shares.....	3-16
D-a. Treasury discount bills.....	3-17
D-b. Central government securities and FILP bonds.....	3-18
D-c. Local government securities.....	3-21
D-d. Public corporation securities.....	3-22
D-e. Bank debentures.....	3-22
D-f. Industrial securities.....	3-23
D-g. External securities issued by residents.....	3-24
D-h. Commercial paper.....	3-24
D-i. Investment trust beneficiary certificates.....	3-25
D-j. Trust beneficiary rights.....	3-25
D-k. Structured-financing instruments.....	3-26
D-l. Mortgage securities.....	3-27
E. Shares and other equities.....	3-27
E-a. Of which: shares.....	3-27
E-b. Equities.....	3-30
F. Financial derivatives.....	3-32
F-a. b. Forward-type instruments and Option-type instruments.....	3-32
G. Insurance and pension reserves.....	3-33
G-a. Insurance reserves.....	3-33
G-b. Pension reserves.....	3-34
H. Deposits money.....	3-35

	Page
I. Trade credits and foreign trade credits.....	3-36
J. Accounts receivable/payable.....	3-36
K. Outward direct investment.....	3-38
L. Outward investments in securities.....	3-38
M. Other external claims and debts.....	3-39
M-a. Of which: Gold and SDRs	3-39
N. Others.....	3-40

Chapter1. Outline of Compilation Method and Remarks

Chapter 1. Outline of Compilation Method and Remarks

The flow of funds accounts (FFA) is composed of a matrix system that contains 45 sectors and 51 transaction items including the number of breakdowns. There are various estimation methods to obtain figure for each cell. More often than not, different estimation method is used to obtain the same figure for preliminary release and a final report. Also, even after the release of the final report, some figures are periodically revised retroactively on an annual basis.

As such, compilation method of the FFA is diverse if seen in detail, but mainly, it could be classified into two approaches. Prior to explaining details on each sector and transaction item, this chapter provides features of the two approaches. Further, remarks for the overall matrix of the FFA which is calculated through combining various estimation method, are outlined in view of the accuracy of estimates¹.

1. “Vertical approach” and “horizontal approach” (last update: August 2006)

The FFA is compiled based on numerous statistics and data², and its compilation method mainly follows two approaches: (1) identification of figure in each cell for each sector by using the financial statements by sector (vertical approach), and (2) identification of figure in each cell by allocating aggregate data to holding assets/liabilities of individual sectors (horizontal approach). In other words, the former estimates sectoral data, and the latter estimates data on transaction items.

“Vertical approach” whose figures are based on individual financial statements is generally considered to be more accurate than “horizontal approach.” Therefore, in principle, estimations are based on “vertical approach,” while “horizontal approach” is used to estimate figures for sectors whose financial statements cannot be obtained. In the actual process of identifying figures for the FFA, figures of sectors where “vertical approach” can be applied are first identified, followed by those for other sectors by fixing figures for each transaction item using “horizontal approach.”

The sectors that are subject to “vertical approach” are financial institutions, public nonfinancial corporations, and social security funds. The sectors that are subject to “horizontal approach” are households, private nonprofit institutions serving households (NPISH), private nonfinancial corporations, central government, and local governments. Overseas sector employs mixture of two approaches that use the data on entire universe of credits and debts, and estimate each cell by allocating aggregate data.

¹ Refer to Chapter 5 in *Guide to Japan's Flow of Funds Accounts* for overviews of the compilation methods.

² Should there be no available data, Bank of Japan conducts an independent research for some of the data (such as financial statements of nonbanks and private non-life insurance companies, data on registered municipal bonds by holding sectors). Financial Statistics Group, Economic Statistics Division, Research and Statistics Department of the Bank of Japan is responsible in answering inquiries regarding the content and format of the research.

2. Remarks for “vertical approach” (last update: July 2010)

In the “vertical approach,” estimation process is finalized by reclassifying various institutions’ financial statements according to the FFA’s transaction items. However, some figures are not directly available from the financial statements. Examples and remarks in these cases are listed as follows.

- Reconciliation between the instruments in financial statements and the transaction items in the FFA

When the instruments in financial statements and the transaction items in the FFA differ, it is required to aggregate or divide the data in financial statements, or to regard certain instruments in financial statements as certain transaction items in the FFA. For example, deposits, outward investments in securities, outward direct investment and external securities issued by residents that are held as assets by domestically licensed banks, are estimated as breakdowns of deposits and foreign securities in the financial statements.

- Conversion from corporate accounting to social accounting

In conformance with the international standard of social accounting³, *Gensaki* (sale and repurchase) transactions, are recorded in the FFA as lendings with bond collateral and not as securities trading. Therefore, when transfers of central government securities, treasury discount bills, and CP in *Gensaki* transaction are treated as trading in the source data⁴, it is necessary to restore the situation before the transfer by estimating respective transferred amount and reorganizing the obtained data.

Since the outstanding of bonds and securities are required to be posted at a market price, the book values in the financial statements are converted to a market value basis through estimation. Conversion methods applied in the FFA are obliged to be fairly simple due to source data limitation — bonds are converted by multiplying the weighted average of market price, while shares are converted by allocating the outstanding on a market price to each sector in accordance with the outstanding on a book value. The market prices of individual bonds or shares are not considered in the FFA.

³ The FFA follows two international standard of social accounting: the System of National Accounts 1993 (1993 SNA) and the Monetary and Financial Statistics Manual, 2000 (the IMF Manual).

⁴ According to the change in corporate accounting standards, a *gensaki* transaction has been recorded in financial statements as a fund transaction (lending of funds with bond collateral) and not as a bond transaction, since FY 2000 (formally since FY 2001 due to interim period), and thus came in line with the treatment of the FFA. However, when using the summary sheet of registered government bonds and clearing government bonds of each business and the research on registered government bonds by holder as source data, it is necessary to restore the situation before the transfer by estimating the respective transferred amount and reorganizing the obtained data. This is because these source data are recorded under the assumption that the ownership of bond transfers to buyers occurs under the *gensaki* transaction.

- Estimation of the aggregate data by using limited number of financial statements

The figures for financial institutions are basically compiled by collecting data from financial statements of all covered institutions. As for finance companies, on the other hand, financial statements of some of the major finance companies are used to estimate the figures for the overall sector.

- Estimation of quarterly data associated with the frequency and the timing in obtaining financial statements

There are many cases where the financial statements on a quarterly basis are not available (only financial statements at the end of accounting period are available), or where the timing in obtaining source data is delayed and thus, some form of estimation becomes necessary. The sectors, of which the figures are influenced relatively significantly in these cases, are 1) insurance and pension fund reserves that are only calculated once a year, and 2) allowances for uncollectibles (this is used in converting loans of private financial institutions to a real value basis) which are compiled once in a half year. Respective quarterly figures for the above are estimated by using the trend in the past. The figures are revised retroactively in the following annual revision, after obtaining the data on outstanding⁵. And, 3) for the overseas sector, since the source data - the outstanding data (*the International Investment Position of Japan*) on an end-of-year basis - is released quite late (around the middle of May), outstanding figures for end-March, June and September, and preliminary figures for end-December outstanding are estimated by cumulating flow data (*the Balance of Payments Statistics*) on end-of-year outstanding data for the recent quarter (differences between the outstanding estimated from the flow data and the actual end-of-year outstanding are treated as reconciliation figures.)

3. Remarks for “horizontal approach” (last update: August 2006)

There are various measures in “horizontal approach.” Examples and remarks of major estimation measures are listed as follows.

- Data estimation for each entity by using the statistics on financial institutions by counterparty.

Deposits and loans are typical examples of using the statistics on counterparties of financial institutions. Since accurate and detailed data can be obtained from banks and Shinkin banks, and these data cover much of the “Deposits and loans,” the overall accuracy of estimates is high. It should be noted, however, that certain estimations are employed in cases where there is no data to distinguish, for example, “Loans to corporations” from “Loans to sole proprietorships (loans to households in the FFA)” in “Loans to businesses,” which are estimated by allocating the figures at the estimated ratio.

⁵ In principle, data are revised retroactively in every March.

- Estimation of data for each entity by using flow data on sales

Methods to estimate holding amount of financial instruments by each entity utilizing flow data on sales of financial instruments are used for certificates of deposits and investment trust beneficiary certificates (in part). Since flow data on these items at new issues by entity are available, approximate holding amount could be obtained. The changes in holding amount by sector caused by reselling or redemptions are not reflected in the FFA.

- Estimation of data for each entity by using the data on registered outstandings

Outstanding holding of central government securities by entity are basically obtained from the Bank of Japan data on the outstanding of central government securities (outstanding of registered and clearing government bonds), while the figures for industrial securities are from bond-registering institutions' data on outstanding. As for the latter, the source data do not cover the entire bond-registering institutions, and the classification of sector in the bond-registering institutions is different to the treatment in the FFA. Therefore, errors and omission in its estimation is considered to be relatively large.

- Estimation of data for each entity by using market statistics

The figures for shares, bond *Gensaki* transactions and bond lending transactions with cash collateral, and financial derivatives are based on each market statistics. Since the degree of detail in each market statistics differs, estimations are to play a bigger role. Especially for financial derivatives, whose definition of sectors differ from those of the FFA, and quarterly figures do not exist, estimates are calculated by employing numerous assumptions.

4. Accuracy of the estimates of the FFA (last update: July 2010)

As explained above, the FFA employs various estimation methods, and thus, it is important to note the accuracy of each figure in the matrix differs. For reference, a rough sketch of the differing accuracies is illustrated on the following page. On the whole, quite accurate statistics are maintained especially of the vital factors such as deposits and loans in financial institutions. From the viewpoint of estimation method, “vertical approach” provides higher accuracy than “horizontal approach.”⁶

⁶ Viewing from the figures of end-March 2005, approximately 60% (assets 3,571 trillion yen, liabilities 3,561 trillion yen) of total assets/liabilities (5,941 trillion yen) in the FFA provide “high” accuracy, while less than 5% (assets 289 trillion yen, liabilities 216 trillion yen) of those provide “low” accuracy.

Accuracy of the Estimates in Assets & liabilities Table

:High
 : Middle
 : Low

	Financial institutions								Nonfinancial corporations		General government		Households		NPISH		Overseas	
			Of which, depository corporations (Banks, postal savings, collectively managed trusts)		Insurance and pension funds		Other financial intermediaries (Securities investment trusts, non-banks, Fiscal Loan Fund, government financial institutions, securities companies)				(Central government, Local governments, Social security funds)				(Legally incorporated educational institutions, social welfare corporations, and religious corporations)			
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
	2,974		1,485		459		856		754		495		1,422		46		249	
Currency and deposits 1,248																		
Deposits with the Fiscal Loan Fund 227																		
Loans 1,519																		
Of which, loans by private financial institutions																		
Of which, loans by public financial institutions																		
Securities other than shares 1,139																		
Of which, treasury discount bills																		
Central government securities and FILP bonds																		
Local government securities																		
Industrial securities and bank debentures, etc.																		
Investment trust beneficiary certificates, etc.																		
Structured-financing instruments																		
Shares and other equities 594																		
Financial derivatives 33																		
Insurance and pension reserves 383																		
Deposits money, etc. 207																		
Trade credits and foreign trade credits 233																		
External claims, etc. 359																		

Notes:

1. “High” indicates that the figures are compiled directly by using the original source data. “Middle” indicates that the figures are estimated by using original source data where the information on estimations is generally available. “Low” indicates that the figures are estimated where the information on estimations is not available, or where the figures are estimated residually by deducting other transaction items from the total. (Empty cells indicate that there is no figure compiled as of the end of March 2005). It is assumed that there is no timing problem in obtaining source data (in compiling final figures).
2. “Industrial securities and bank debentures, etc.” indicates the total of “Industrial securities,” “Bank debentures,” and “Public corporation securities.” “Investment trust beneficiary certificates, etc.” indicates the total of “Investment trust beneficiary certificates” and “Trust beneficiary rights.” “Deposits money, etc.” indicates the total of “Deposits money,” “Accounts receivable/payable,” and “Others.” “External claims, etc.” indicates the total of “Outward direct investment,” “Outward investment in securities,” and “Other external claims and debts.”
3. Each figure denotes the balance of financial assets as of the end of March 2005 (in trillion yen).

Chapter2. Estimation Methods of Sectors

Chapter 2. Estimation Methods of Sectors

1. Financial institutions (last update: August 2006)

“Financial institutions” equals the sum of “Central bank,” “Depository corporations,” “Insurance and pension funds,” “Other financial intermediaries,” and “Financial auxiliaries.”

Financial holding companies, whose group’s primary activities are financial intermediary or financial supporting activities and its main objective is to control and manage the subsidiaries, are also included in this sector (and each sub sectors).

1-1. Central bank (last update: October 2011)

“Central bank” is mainly compiled by using the financial statement of the Bank of Japan.

Outline of estimation methods of individual items in this sector

Source data	Assets items	Liabilities items
Of those, extracted from the source data		
Financial statements	Foreign currency deposits, Bank of Japan loans, bills purchased, repurchase agreements and securities lending transactions, treasury discount bills, central government securities and FILP bonds ¹ , Industrial securities, Commercial paper, Investment trust beneficiary certificates, structured-financing instruments, shares and other equities, deposits money, accounts receivable, outward investment in securities, other external claims and debts	Deposits with the Bank of Japan, government deposits, bills sold, repurchase agreements and securities lending transactions, shares and other equities, deposits money, accounts payable, other external claims and debts, others
The data used in compiling each transaction item	Others	Currency

Note:

“Central government securities and FILP bonds,” “Industrial securities,” “Investment trust beneficiary certificates,” “Shares (on the assets side),” “Outward investment in securities” and “Other external claims and debts” are evaluated at a market price.

¹ FILP bonds issued by the Fiscal Loan Fund Special Accounts after fiscal 2001 are included in "Central government securities and FILP bonds." Here, "Central government securities and FILP bonds" and "Central government securities" are used interchangeably.

Details on major transaction items in this category:

- Currency (liabilities side)

The category is the sum of banknotes in circulation from the financial statements, and coins in circulation from *Currency in Circulation*. Even though the issuer of coins is the central government, the entire amount outstanding of coins is compiled on the liabilities side of the central bank, considering coins and currencies are exchangeable. As a result, the central bank is recognized as having a claim equal to the amount outstanding of coins in circulation against the central government; the central bank counts this as “Others” on the assets side.

1-2. Depository corporations (last update: August 2006)

“Depository corporations” equals the sum of “Banks,” “Postal savings,” and “Collectively managed trusts.”

1-2-1. Banks (last update: August 2006)

“Banks” equals the sum of “Domestically licensed banks,” “Foreign banks in Japan,” “Financial institutions for agriculture, forestry, and fisheries,” and “Financial institutions for small business.”

1-2-1-1. Domestically licensed banks (last update: August 2014)

“Domestically licensed banks” is mainly compiled by using the financial statements associated with domestic branch account of this sector. The transaction item that cannot be compiled by this line is alternatively compiled by using the data in Loans and Discounts by *the Bank of Japan*, the statistics on loans (*the Loans to individuals <Housing funds, Funds for purchase of consumer goods and service>*), the data on stock markets (statistics compiled by Tokyo stock exchange), and the data on bank debentures issued by financial institutions.

Financial holding companies, whose major subsidiaries are domestically licensed banks, are included in this sector by compiling figures for each transaction item based on the financial statement of each holding company.

Outline of estimation methods of individual items in this sector

Source data	Assets items	Liabilities items
Of those, extracted from the source data		
Financial statements	Currency, deposits with the Bank of Japan, call loans and money, bills purchased, loans by private financial institutions, repurchase agreements and securities lending transactions, local government securities, public corporation securities, bank debentures, industrial securities, CP, structured-financing instruments, deposits money, accounts receivable, others	Time and savings deposits, certificates of deposits, foreign currency deposits, call loans and money, bills sold, bank debentures, CP, deposits money, accounts payable, others
The data used in compiling each transaction item		Transferable deposits, Bank of Japan loans, shares and other equities, external securities issued by residents
Of those, estimated		
Financial statements: Of which, proportional allocation is employed	[Transferable deposits, time and savings deposits, foreign currency deposits] [External securities issued by residents, outward direct investment, outward investment in securities] [Investment trust beneficiary certificates, trust beneficiary rights, shares and other equities]	
Financial statements:	[Certificate of deposits– CP] [Central government securities and FILP bonds – treasury discount bills]	[Loans by private financial institutions – (Bank of Japan loans + loans by the nonfinancial sector)] [Industrial securities – (bank debentures + external securities issued by residents)]
The data used in compiling each transaction item	Treasury discount bills, financial derivatives, other external claims and debts	Loans by the nonfinancial sector, installment credit, repurchase agreements and securities lending transactions, financial derivatives, other external claims and debts.

Notes:

For the items in square brackets, the total is available from financial statements.

“Loans by private financial institutions,” “Central government securities and FILP bonds,” “Local government securities,” “Public corporation securities,” “Bank debentures,” “Industrial securities,” “Investment trust beneficiary certificates” and “Shares and other equities” are evaluated at a market price (real value basis).

Details on major transaction items in this category:

- Transferable deposits, time and savings deposits, and foreign currency deposits (assets side)

The sum of these items is based on the financial statement of this sector. The amount is allocated proportionally to each instrument by using the composition ratio of deposits estimated from the statistics on deposits (*the Amounts Outstanding of Deposits by Depositor* and *the Deposits, Vault Cash, and Loans and Discounts Outstanding*).

- Certificates of deposits, and CP (assets side)

CP is calculated by deducting the estimated amount of ABCP from the figures of commercial paper (including ABCP) held in *Deposits, Vault Cash and Loans Table*.² “Certificates of deposits” is the residuals calculated by deducting CP (including ABCP) from the sum amount of “Certificates of Deposits” “Commercial Papers” from “Monetary Claims Bought,” and “Short-term Corporate Bonds” in general (banking) accounts, and “Other Trading Assets” in special accounts.

- Loans by private financial institutions (assets side)

This category refers to the sum of loans and inter-office account with overseas branches (in order to treat these as loans to nonresidents) where the data is based on the financial statement of this sector. For housing loans and consumer credits, figures are based on *the Loans to individuals (Housing funds, Funds for purchase of consumer goods and service)* where loans to companies and governments (on a real value basis) are calculated by the residual, which is the remaining after deducting housing loans and consumer credits from the total, less the allowances for individual uncollectibles. Decrease in the book value of the loans, which is caused by direct write-offs (including draw-downs on the allowances), is not recorded in the transaction flow. The difference between the term-on-term difference of amount outstanding and the transaction flow (this is relevant to the amount of direct write-off and write-downs) is posted in the Reconciliation Table.

- Repurchase agreements and securities lending transactions (assets/liabilities side)

This category records the sum of the amount outstanding of repurchase agreements and securities lending transactions. Source data are financial statements. The residual in “Securities lending transactions”—obtained from the difference between assets and liabilities of the category for all sectors—is recorded on the liabilities side of the domestically licensed banks sector.

- Treasury discount bills (assets side)

This category is based on the summary sheet of registered government bonds and clearing government bonds of each business. Certain adjustments are made in order to retrieve the state before the transaction with repurchase agreements³.

- Central government securities and FILP bonds (assets side)

This category refers to the transaction item of central government securities and FILP bonds (including treasury discount bills) less short sales (“Trading securities sold,” “Securities sold,” and “Securities related to trading transactions sold”) on the liabilities side and treasury discount bills that are estimated separately⁴. Figures are converted from a book value basis

² In this statistics, CP is defined as the sum of commercial paper in “Monetary Claims Bought,” short-term corporate bonds, and the commercial paper and short-term bonds in “Other Trading Assets” in special accounts of the financial statements.

³ A *gensaki* transaction held by this sector is estimated by allocating the total amount outstanding of *gensaki* transactions based on the data on money market operations of the Bank of Japan, proportionally by using the composition ratio of treasury discount bills held by those who participate in money market operations (based on the summary sheet of registered government bonds and clearing government bonds).

⁴ Other than government bonds in investment securities and trading account securities, any unidentifiable type of security (securities loaned, trading securities, and trading assets and securities related to trading transactions in trading account) is assumed to be a part of central government securities and FILP bonds.

to a market value basis⁵.

- Shares and other equities (assets side)

This item is the sum of "Listed shares," equities issued by subsidiaries and held by the parent financial holding companies, and equities invested in privately placed real estate funds. The amount of listed shares held by the domestically licensed banks sector is calculated as a residual by subtracting the holding amount of other sectors from the total outstanding amount. The holding amount of equities invested in privately placed real estate funds is estimated based on market surveys on privately placed real estate funds⁶.

- Investment trust beneficiary certificates and trust beneficiary rights (assets side)

The sum of these items is based on "Other securities" recorded in the financial statement minus equities invested in privately placed real estate funds. Then the figure is allocated by a certain ratio to each item. "Trust beneficiary rights" in this category refers to the allocated amounts plus pecuniary trusts.

- Financial derivatives (assets/liabilities side)

The amount outstanding of OTC-traded derivatives is estimated by using *the Results of the Regular Derivatives Market Statistics in Japan*, benchmarking on the figures that are taken from *the Central Bank Survey of Foreign Exchange and Derivatives Market Activity* (conducted once in three years). Since *the Results of the Regular Derivatives Market Statistics in Japan* is available only once in a half year (end of June and December), the amounts of other quarters are estimated by using the financial statement of this sector and the Exchange market data (*the Open Interest in Key Statistics for Government Bond Futures Options*) to calculate the growth of amount outstanding in each quarter.

The amount outstanding of Exchange-traded derivatives is based on the financial information of major banks. Since this information is available once in a half year (end of March and September), the amounts of other quarters are estimated by using the growth of amount outstanding of open interest.

- External securities issued by residents and outward investment in securities (assets side)

"External securities issued by residents" is a part of the holding amounts of foreign securities on financial statements. "Outward investments in securities" is the amounts of foreign securities in the financial statements less "Outward direct investment" and "External securities issued by residents." "Outward investments in securities" (transaction flow) is calculated by subtracting the transaction amount of banks other than the domestically licensed banks sector in the Flow of Funds Accounts Statistics from the amount recorded in the "Deposit-taking financial institutions, except the central bank" sector under the financial account (portfolio investment) in the *Balance of Payments Statistics*.

⁵ The difference between assets and liabilities is adjusted in the assets of domestically licensed banks to balance the assets and liabilities of "Central government securities and FILP bonds."

⁶ The Survey of ARES Members on Real Estate Private Funds released by the Association for Real Estate Securitization (ARES) and the Survey on Private Real Estate Funds in Japan released by Sumitomo Mitsui Trust Research Institute Co., Ltd are mainly used for estimation.

- Outward direct investment (assets side)

First, outward direct investments by the "Financial institutions" sector are estimated based on the year-end data of the "Finance and insurance" sector in the *Direct Investment Position by Region and Industry (International Investment Position of Japan)*. Then the amount is allocated proportionally to constituent sectors (domestically licensed banks, financial institutions for agriculture, forestry, and fisheries, and financial institutions for small businesses) according to the amount of foreign securities in the financial statements of each sector. The quarter-end outstanding of the "Financial institutions" sector is recorded by adding the transaction amount of "Equity capital" of the "Finance and insurance" sector—which is estimated from the *Balance of Payments Statistics*—to the year-end amount outstanding in the *International Investment Position of Japan*. The estimated outstanding is then allocated proportionally to each sector.

- Other external claims and debts (assets/liabilities side)

Figures on the assets side are recorded using the following method: first the total amount of banks is calculated from the estimate of "Other external claims and debts" of the overseas sector (liabilities side) which is then multiplied by the composition ratio of deposit-taking financial institutions, except the central bank's investments to other accounts receivable⁷ in the *Balance of Payments Statistics* or *International Investment Position of Japan*. The holding amount of banks other than domestically licensed banks based on the financial statement of this sector is then deducted from this estimate. On the liabilities side, the difference between other accounts payable of the deposit-taking financial institutions, except the central bank sector recorded in the *Balance of Payments Statistics* or *International Investment Position of Japan* and the amount of banks other than domestically licensed banks based on the financial statement is recorded.

- Transferable deposits and deposits money (liabilities side)

"Transferable deposits" refers to transferable deposits recorded in the financial statement of this sector minus deposits money with the agencies of the Bank of Japan recorded in the financial statement of the Bank of Japan (assuming the recipients of such deposits are solely domestically licensed banks). "Deposits money" refers to the deposits money with the agencies of the Bank of Japan mentioned above and deposits money other than "Currency and deposits".

- Loans by private financial institutions (liabilities side)

This category is estimated residually that is calculated by the total amount recorded in the financial statement (loans by private financial institutions, Bank of Japan loans, and loans by the nonfinancial sector) less "Bank of Japan loans" (based on *the Loans and Discounts by the Bank of Japan*) and "Loans by the nonfinancial sector"⁸.

- Loans by the nonfinancial sector (liabilities side)

This category refers to the sum of borrowings by social security funds and overseas. Of these, borrowings from social security funds are the loans from trust accounts to banking accounts that are consolidated into social security funds (the portion entrusted from social

⁷ "Miscellaneous investments" does not include foreign exchange reserves.

⁸ "The total of borrowings by private financial institutions, Bank of Japan loans, and loans by the nonfinancial sector" is the sum of the borrowed money, the inter-office account with overseas branch, the debit of trust accounts in trust banks.

security funds to the trust accounts of domestically licensed banks). Borrowings from the overseas sector are calculated by deducting the borrowings by foreign banks in Japan from the borrowings by the deposit-taking financial institutions, except the central bank sector (based on the *International Investment Position of Japan*).

- Installment credit (liabilities side)

“Installment credit” is estimated by multiplying the holding amount of installment credits of finance companies (based on the financial statement) by the composition ratio of credits to domestically licensed banks in major finance companies.

- Industrial securities (liabilities side)

This category is estimated residually, i.e. bonds, corporate bonds, and convertible bonds (based on the financial statement) less bank debentures (based on the financial statement) and external securities issued by residents (based on the financial statement of bond issuing entities and stock exchange market data).

- Shares and other equities (liabilities side)

The total amount outstanding of shares is evaluated at a market price based on individual company data on number of shares and stock price⁹. Each company is in the sector of “Banks” listed on the Stock Exchange market. Transaction flow is calculated by taking the sum of amounts of equity raised by issuing new stocks, and exercised amounts of bonds with rights to reserve new stock from the data on fund raised in the stock market.

Equities issued by subsidiaries of financial holding companies (included in “Other equities”) are evaluated on market value by using the market price of the shares issued by the parent holding company, as its market price are regarded to be equal to those of the parent holding company.

- Accounts receivable/payable (liabilities side)

This category records accrued expenses and unearned income based on financial statements. Unfunded retirement benefit obligations are also recorded based on consolidated financial statements of listed companies.

- Others (assets/liabilities side)

When financial surpluses and deficits (the difference between the amount of fund raising and financial investment; transaction flow) estimated in the FFA does not equal the figure calculated directly from data sources such as financial statements, the difference is added to “Others” for adjustment.

⁹ Before 2004, “Banks” in the source data, “*Market Value by Types of Industry*,” which shows the data on the total amounts of shares and equities evaluated at a market value of Stock Exchange and OTC-registered stock markets, is assumed to be identical to domestically licensed banks in the FFA. However, because the source data is no longer disseminated, the compilation method has been changed by estimating the figures based on the individual company’s source data.

1-2-1-2. Foreign banks in Japan (last update: October 2013)

“Foreign banks in Japan” is mainly compiled by using the financial statement associated with the branch account of foreign banks. The transaction items that cannot be compiled by this line is alternatively compiled by using *Loans and Discounts by the Bank of Japan*.

Outline of estimation methods of individual items in this sector

Source data	Assets items	Liabilities items
Of those, extracted from the source data		
Financial statements	Currency, deposits with the Bank of Japan, foreign currency deposits, call loans and money, bills purchased, loans by private financial institutions, repurchase agreements and securities lending transactions, local government securities, public corporation securities, bank debentures, industrial securities, CP, structured-financing instruments, shares and other equities, deposits money, accounts receivable, outward investment in securities, other external claims and debts, others	Transferable deposits, time and savings deposits, certificates of deposits, foreign currency deposits, call loans and money, loans by the nonfinancial sector, bills sold, repurchase agreements and securities lending transactions, deposits money, accounts payable, other external claims and debts, others
The data used in compiling each transaction item		Bank of Japan loans
Of those, estimated		
Financial statements: Of which, proportional allocation is employed	[Transferable deposits, time and savings deposits] [Investment trust beneficiary certificates, trust beneficiary rights]	
Financial statements:	[Certificates of deposit – CP] [Central government securities and FILP bonds – treasury discount bills]	[Loans by private financial institutions – (Bank of Japan loans + loans by the nonfinancial sector)]
The data used in compiling each transaction item	Treasury discount bills	Installment credit

Notes:

For the items in square brackets, the total is available from financial statements.

“Loans by private financial institutions,” “Central government securities and FILP bonds,” “Local government securities,” “Public corporation securities,” “Bank debentures,” “Industrial securities,” “Investment trust beneficiary certificates,” and “Shares” are evaluated at a market price (real value basis).

Details on major transaction items in this category:

- Transferable deposits and deposits money (assets side)

Based on the financial statement, this category refers to the sum of transferable deposits and deposits money allocated proportionally to each sector by using the composition ratio, estimated from the statistics on deposits (*the Amounts Outstanding of Deposits by Depositor*, and *the Deposits, Vault Cash, and Loans and Discounts Outstanding*).

- Certificates of deposit and CP (assets side)

This category refers to the sum of the holding amounts of these items in general (banking) accounts and special accounts of the financial statement. For the holding amount of special accounts, the amount outstanding of certificates of deposit is the total amount of “Other Trading Assets.”

- Loans by private financial institutions (assets side)

Based on the financial statement, the amount outstanding (on a real value basis) in this category is the sum of loans and inter-office accounts between head office and overseas branches (in order to treat these as loans to nonresidents) less the allowances for individual uncollectibles. Depreciation of the book value of the loans, caused by direct write-offs (including draw-downs on the allowances), is not recorded in the transaction flow. The difference between the term-on-term difference in the outstanding and the transaction flow (this is relevant to the amount of direct write-off and write-downs) is posted in the Reconciliation Table. The ratio of the allowances for individual uncollectibles and direct write-offs to the amount outstanding of loans in this sector is assumed to be identical to the one in domestically licensed banks.

- Repurchase agreements and securities lending transactions (assets/liabilities side)

This category records the sum of the amount outstanding of repurchase agreements and securities lending transactions based on financial statements.

- Treasury discount bills (assets side)

This category is based on the summary sheet of registered government bonds and clearing government bonds of each business. Certain adjustment is conducted in order to retrieve the state before the transaction with repurchase agreements¹⁰.

- Central government securities and FILP bonds (assets side)

This category refers to the transaction item of central government securities and FILP bonds (including treasury discount bills) minus short sales (“Trading Securities Sold,” “Securities Sold,” and “Securities Related to Trading Transactions Sold”) on the liabilities side and treasury discount bills that are estimated separately¹¹. Figures are converted from book value basis to market value basis.

- Investment trust beneficiary certificates and trust beneficiary rights (assets side)

The sum of these items is based on “Other securities” listed in the financial statement where the figure is allocated by a certain ratio to each item. “Trust beneficiary rights” in this category refers to the allocated amounts plus pecuniary trusts.

¹⁰ *Gensaki* transaction held by this sector is estimated by allocating the total amount outstanding of *Gensaki* transaction, based on the data on money market operation of the Bank of Japan, proportionally by using the composition ratio of treasury discount bills held by those who participate in the money market operation (based on the summary sheet of registered government bonds and clearing government bonds).

¹¹ Other than government bonds in investment securities and trading account securities, unidentifiable types of securities (securities loaned, trading securities loaned, and trading assets and securities related to trading transactions in trading accounts) are assumed to be a part of central government securities and FILP bonds.

- Loans by private financial institutions (liabilities side)

This category is estimated residually that is calculated by the total amount recorded in the financial statement (loans by private financial institutions, Bank of Japan loans, and loans by the nonfinancial sector) less “Bank of Japan loans (based on *the Loans and Discounts by the Bank of Japan*)” and “Loans by the nonfinancial sector”¹².

- Installment credit (liabilities side)

“Installment credit” is estimated by multiplying the holding amount of installment credits of finance companies (based on the financial statement) by the composition ratio of credits to foreign banks in Japan.

1-2-1-3. Financial institutions for agriculture, forestry, and fisheries (last update: August 2014)

“Financial institutions for agriculture, forestry, and fisheries” is mainly compiled by using the financial statements associated with the domestic branch account of Norin Chukin Bank, and the summary data on the financial statement of Credit Federation of Agricultural Cooperatives, Agricultural Cooperatives, Credit Federation of Fishery Cooperatives, and Fishery Cooperatives. The transaction items that cannot be compiled by this line is alternatively compiled by using the statistics on loans (*the Loans to individuals <Housing funds, Funds for purchase of consumer goods and service>*).

¹² “The total of borrowings by private financial institutions, Bank of Japan loans, and loans by the nonfinancial sector” is the sum of the borrowed money, and the inter-office account with domestic sector.

Outline of estimation methods of individual items in this sector

Source data	Assets items	Liabilities items
Of those, extracted from the source data		
Financial statements	Currency, deposits with the Bank of Japan, call loans and money, bills purchased, loans by private financial institutions, repurchase agreements and securities lending transactions, local government securities, public corporation securities, bank debentures, industrial securities, CP, structured-financing instruments, shares and other equities, mortgage securities, deposits money, accounts receivable, other external claims and debts, others	Transferable deposits, time and savings deposits, certificates of deposits, foreign currency deposits, call loans and money, bills sold, loans by private financial institutions, loans by the nonfinancial sector, repurchase agreements and securities lending transactions, bank debentures, external securities issued by residents, shares and other equities, deposits money, accounts payable, other external claims and debts, others
Of those, estimated		
Financial statements: Of which, proportional allocation is employed	[Transferable deposits, time and savings deposits, and foreign currency deposits] [External securities issued by residents, outward direct investment, outward investment in securities] [Investment trust beneficiary certificates, trust beneficiary rights]	
Financial statements:	[Certificates of deposits – CP] [Central government securities and FILP bonds – treasury discount bills]	
The data used in compiling each transaction item	Treasury discount bills	

Notes:

For the items in square brackets, the total is available from financial statements.

“Loans by private financial institutions,” “Central government securities and FILP bonds,” “Local government securities,” “Public corporation securities,” “Bank debentures,” “Industrial securities,” “Investment trust beneficiary certificates,” and “Shares” are evaluated at a market price (real value basis).

Details on major transaction items in this category:

- Transferable deposits, time and savings deposits, and foreign currency deposits (assets side)

The sum of these items is based on the financial statement of this sector. The amount is allocated proportionally to each instrument by using the composition ratio of deposits estimated from the statistics on deposits (*the Amounts Outstanding of Deposits by Depositor*, and *the Deposits, Vault Cash, and Loans and Discounts Outstanding*).

- Certificates of deposit and CP (assets side)

For *Norin Chukin* Bank, the amount is calculated by taking the sum of the holding amounts of general (banking) accounts and special accounts, recorded in the financial statement. For the holding amount of special accounts, the amount outstanding of CP is the total amount of “Other Trading Assets.” It then adds other institutions’ holding amounts based on each financial statement¹³.

¹³ For Agricultural cooperatives and credit Federation of Fishery cooperatives, the total amount of CP refers to “Monetary Claims Bought” from the financial statement.

- Loans by private financial institutions (assets side)

This category refers to the sum of loans of each institution and inter-office account of *Norin Chukin Bank* (regarding all amounts as loans to nonresidents), based on the financial statement. For housing loans and consumer credits, figures are based on *the Loans to individuals (Housing funds, Funds for purchase of consumer goods and service)* where loans to companies and governments (on a real value) are calculated residually, i.e. the remaining after deducting housing loans and consumer credits from the total, less the allowances for individual uncollectibles. Decrease in book value of the loans, which is caused by direct write-offs (including draw-downs on the allowances), is not recorded in the transaction flow. The difference between the term-on-term difference of amount outstanding and the transaction flow (this is relevant to the amount of direct write-off and write-down) is posted in the Reconciliation Table.

The institutions, of which the stock data is evaluated on a real value, are *Norin Chukin Bank*, *Credit Federation of Agricultural Cooperatives*, and *Credit Federation of Fishery Cooperatives*. The ratio of the allowances for individual uncollectibles and direct write-offs to the amount outstanding of loans in these institutions is assumed to be identical to the one in domestically licensed banks.

- Repurchase agreements and securities lending transactions (assets/liabilities side)

This category records the sum of the amount outstanding of repurchase agreements and securities lending transactions based on financial statements.

- Treasury discount bills (assets side)

This category is based on the summary sheet of registered government bonds and clearing government bonds of each business. Certain adjustment is conducted in order to retrieve the state before the transaction with repurchase agreements¹⁴.

- Central government securities and FILP bonds (assets side)

This category refers to the transaction item of central government securities and FILP bonds (including treasury discount bills) minus short sales (“Trading Securities sold for short sales,” “Securities Related to Trading Transactions sold for short sales”) and treasury discount bills that are estimated separately¹⁵. Figures are converted from the book value basis to the market value basis.

- Investment trust beneficiary certificates and trust beneficiary rights (assets side)

The sum of these items is based on “Other securities” listed in the financial statement where the figure is allocated by a certain ratio to each item. “Trust beneficiary rights” in this category refers to the allocated amounts plus pecuniary trusts.

¹⁴ *Gensaki* transaction held by this sector is estimated by allocating the total amount outstanding of *Gensaki* transaction, based on the data on money market operation of the Bank of Japan, proportionally by using the composition ratio of treasury discount bills held by those who participate the money market operation (based on the summary sheet of registered government bonds and clearing government bonds).

¹⁵ Other than government bonds loaned in investment securities and trading account securities, all unidentifiable securities (securities loaned, trading securities, and trading assets and securities related to trading transactions in trading accounts) are assumed to be a part of central government securities and FILP bonds.

- External securities issued by residents and outward investment in securities (assets side)

For those held by the *Norin Chukin* Bank, "External securities issued by residents" is a part of the holding amount of foreign securities in the financial statements, and "Outward investments in securities" is calculated using the amounts of foreign securities in the financial statements less "Outward direct investment" and "External securities issued by residents" which are estimated separately. "Foreign securities" held by institutions other than the *Norin Chukin* Bank is posted under "Outward investment in securities."

- Outward direct investment (assets side)

First, outward direct investment by the "Financial institutions" sector is estimated based on the year-end data of the "Finance and insurance" sector in the *Direct Investment Position by Region and Industry (International Investment Position of Japan)*. Then the amount is allocated proportionally to constituent sectors (domestically licensed banks, financial institutions for agriculture, forestry, and fisheries, and financial institutions for small businesses) according to the amount of foreign securities in the financial statements held by each sector. The quarter-end outstanding of the "Financial institutions" sector is recorded by adding the transaction amount of "Equity capital" of the "Finance and insurance" sector in the *Balance of Payments Statistics* to the year-end amount outstanding in the *International Investment Position of Japan*. Then the estimated outstanding is allocated proportionally to each sector.

1-2-1-4. Financial institutions for small businesses (last update: February 2011)

"Financial institutions for small businesses" is mainly compiled using financial statements associated with the domestic accounts of Shinkin Central Bank and Shoko Chukin Bank, and the breakdown data on the financial statements of Shinkin Banks, Credit Cooperatives, Labor Banks, Japan Post Bank (from the fourth quarter of 2007) and etc.. The transaction items that cannot be compiled by this line are alternatively compiled using *Loans and Discounts by the Bank of Japan* and the statistics on loans (*the Loans to individuals <Housing funds, Funds for purchase of consumer goods and service>*).

With regard to the Resolution and Collection Corporation, the part of assets and liabilities of this institution is posted under this category, assuming that they are received from the former Resolution and Collection Bank. This treatment is made due to the fact that this institution undertook the business of failed Credit Cooperatives¹⁶.

¹⁶ The FFA treats the Resolution and Collection Corporation as a finance company. However, the assets and liabilities of those received from the former Resolution and Collection Bank are posted under this category. The items treated in this category are as follows.

Assets side: Deposits with the Bank of Japan

Liabilities side: Deposits, Bank of Japan loans

Following items are posted by allocating with the portion held by finance companies.

Assets side: Central government securities

Liabilities side: Shares and other equities

Outline of estimation methods of individual items in this sector

Source data	Assets items	Liabilities items
Of those, extracted from the source data		
Financial statements	Currency, call loans and money, bills purchased, loans by private financial institutions, loans by public financial institutions, repurchase agreements and securities lending transactions, local government securities, public corporation securities, bank debentures, industrial securities, CP, structured-financing instruments, shares and other equities, deposits money, accounts receivable, other external claims and debts, others	Transferable deposits, time and savings deposits, certificates of deposits, foreign currency deposits, call loans and money, bills sold, loans by private financial institutions, loans by public financial institutions, repurchase agreements and securities lending transactions, bank debentures, external securities issued by residents, shares and other equities, deposits money, accounts payable, other external claims and debts, others
The data used in compiling each transaction item		Bank of Japan loans
Of those, estimated		
Financial statements: Of which, proportional allocation is employed	[Transferable deposits, time and savings deposits, foreign currency deposits] [External securities issued by residents, outward direct investment, outward investment in securities] [Investment trust beneficiary certificates, trust beneficiary rights]	
Financial statements:	[Certificates of deposits - CP] [Central government securities and FILP bonds – treasury discount bills]	
The data used in compiling each transaction item	Deposits with the Bank of Japan, treasury discount bills	

Notes:

For the items in square brackets, the total is available from financial statements.

“Loans by private financial institutions,” “Central government securities and FILP bonds,” “Local government securities,” “Public corporation securities,” “Bank debentures,” “Industrial securities,” “Investment trust beneficiary certificates,” and “Shares” are evaluated at a market price (real value basis).

Details on major transaction items in this category:

- Deposits with the Bank of Japan (assets side)

This category refers to the residual that is the difference between the total of deposit and the deposits with other institutions, based on the financial statement of the Bank of Japan.

- Transferable deposits, time and savings deposits, and foreign currency deposits (assets side)

The sum of these items is based on the financial statements. The amount is allocated proportionally to each instrument by using the composition ratio of deposits estimated from the statistics on deposits (the *Amounts Outstanding of Deposits by Depositor*, and the *Deposits, Vault Cash, and Loans and Discounts Outstanding*). For the Japan Post Bank, these items are available in the financial statements.

- Certificates of deposit and CP (assets side)

For Shinkin Central Bank, Shinkin Banks, and Shinkumi Federation Bank, the amount (including ABCP) refers to the amount outstanding of commercial papers held from *Deposits, Vault Cash and Loans Table*¹⁷. It then adds the amount outstanding held by other institutions based on financial statements¹⁸, and deducts ABCP estimated separately from it.

For Shinkin Central Bank, Shinkin Banks, and Shinkumi Federation Bank, “Certificate of Deposits” is the residuals calculated by deducting CP (including ABCP) from the sum of “Certificates of Deposits,” “Commercial Paper” from “Monetary Claims Bought,” “Dematerialized Commercial Paper” from general (banking) accounts, and “Other Trading Assets” from special accounts. For other institutions, the amounts are based on individual financial statements.

- Loans by private financial institutions (assets side)

This category refers to the sum of loans of each institution and the inter-office account of Shoko Chukin Bank (regarding all amounts as loans to nonresidents), based on financial statements. For housing loans and consumer credits, figures are based on *the Loans to individuals <Housing funds, Funds for purchase of consumer goods and service>* where loans to companies and governments (on a real value) are calculated by the residual, which is the remaining after deducting housing loans and consumer credits from the total, less the allowances for individual uncollectibles. Decrease in book value of the loans, caused by direct write-offs (including draw-downs on the allowances), is not recorded in the transaction flow. The difference between the term-on-term difference of the amount outstanding and the transaction flow (this is relevant to the amount of direct write-off and write-downs) is posted in the Reconciliation Table.

The institutions of those that the stock data is evaluated on a real value are Shinkin Central Bank, Shinkumi Federation Bank, Credit Cooperatives, The Rokinren Bank, Labor Banks, Shoko Chukin Bank and Shinkin Bank. The ratio of the allowances for individual uncollectibles and direct write-offs to the amount outstanding of loans in Shinkin Bank is assumed to be identical to the one in domestically licensed banks.

- Repurchase agreements and securities lending transactions (assets/liabilities side)

This category records the sum of the amount outstanding of repurchase agreements and securities lending transactions based on financial statements.

- Treasury discount bills (assets side)

This category is based on the summary sheet of registered government bonds and clearing government bonds of each business. Certain adjustments are conducted in order to retrieve the state before the transaction with repurchase agreements¹⁹.

¹⁷ In this statistics, CP is defined as the sum of commercial paper in "Monetary Claims Bought," short-term corporate bonds, and the commercial paper and short-term bonds in "Other Trading Assets" in special accounts of the financial statements.

¹⁸ For Shoko Chukin Bank, CP refers to the figures from general (banking accounts) and “Other Trading Assets” from the special accounts.

¹⁹ *Gensaki* transaction held by this sector is estimated by allocating the total amount outstanding of *Gensaki* transaction, based on the data on money market operation of the Bank of Japan, proportionally by using the composition ratio of treasury discount bills held by those who participate the money market operation (based on the summary sheet of registered government bonds and clearing government bonds).

- Central government securities and FILP bonds (assets side)

This category refers to the transaction item of central government securities and FILP bonds (including treasury discount bills) minus short sales (“Trading securities sold,” “Securities sold” and “Securities Related to Trading Transactions sold”) on the liabilities side and treasury discount bills that are estimated separately²⁰. Figures are converted from the book value basis to the market value basis.

For the Japan Post Bank, the sum of these items is estimated from the financial statements.

- Investment trust beneficiary certificates and trust beneficiary rights (assets side)

The sum of these items is based on “Other securities” recorded in the financial statement, which is allocated by a certain ratio to each item. “Trust beneficiary rights” in this category refers to the allocated amounts plus pecuniary trusts.

- External securities issued by residents and outward investment in securities (assets side)

For those held by the Shoko Chukin Bank, Shinkin Central Bank, Shinkumi Federation Bank, The Rokinren Bank, and Japan Post Bank, "External securities issued by residents" is a part of the holding amount of foreign securities in the financial statements, and outward investments in securities is calculated using the amounts of foreign securities less outward direct investment and external securities issued by residents which are estimated separately. “Foreign securities” held by other institutions such as Shinkin Banks, Credit Cooperatives, and Labor Banks are posted under "Outward investment in securities."

- Outward direct investment (assets side)

First, outward direct investment by the "Financial institutions" sector is estimated based on the year-end data of the “Finance and insurance” sector of the Direct Investment Position by Region and Industry (*International Investment Position of Japan*). Then the amount is allocated proportionally to constituent sectors (domestically licensed banks, financial institutions for agriculture, forestry, and fisheries, and financial institutions for small businesses) according to the amount of foreign securities in the financial statements held by each sector. The quarter-end outstanding of the "Financial institutions" sector is recorded by adding the transaction amount of “Equity capital” of the “Finance and insurance” sector in the *Balance of Payments Statistics* to the year-end amount outstanding in the *International Investment Position of Japan*. Then the estimated outstanding is allocated proportionally to each sector.

²⁰ Other than government bonds in investment securities and trading account securities, unidentifiable securities (securities loaned, trading securities loaned, and trading assets and securities related to trading transactions in trading accounts) are assumed to be a part of central government securities and FILP bonds.

1-2-2. Postal savings (Before the 3rd quarter of 2007) (last update: February 2011)

"Postal savings" is mainly compiled by using the financial statements of postal savings in Japan Post (the former Postal Savings Special Account²¹), *the Postal Saving News* and *Postal Saving Operations*.²² The transaction items that cannot be compiled by this line are alternatively compiled by using the summary sheet of registered government bonds and clearing government bonds of each business, and from data on the amount outstanding of deposits with the Fiscal Loan Fund (*the Monthly Report of Fiscal Loan Fund*).

The breakdown of investment assets in a trust account is estimated by using the breakdown data of operational assets of money held in trust (identifying the amount outstanding of assets including "Shares" and "Outward investments in securities") compiled by the Japan Post.

These source data estimate the figures prior to the consolidation, as explained below.

²¹ Before fiscal year 2000, "the postal savings special account" consisted of "general account (receipt of postal savings, deposits with the former Trust Fund Bureau etc.)" and "the special account for financial deregulation (loans from the former Trust Fund Bureau, management of the loan fund etc.)." Therefore, figures were estimated separately for each account, and then totaled to obtain figure for the postal savings. However, there has been no distinction between these accounts since fiscal year 2001.

²² Before fiscal year 2002, the funds entrusted to "the Special Account for Fund-Management Operations" of the Postal Life Insurance Welfare Corporation (before fiscal year 2000, the funds were entrusted by "the special account of financial deregulation of the Postal Saving Special Accounts") are consolidated into postal savings sector by estimating the composition of investment assets of the account. For the money trusts held by the Postal Life Insurance Welfare Corporation, the entire account is consolidated into postal savings (this is the so-called "two-stage consolidation process" where the first stage is the consolidation of the designated noncollectively invested money trusts into Postal Life Insurance funds, and the second stage is the consolidation of Postal Life Insurance funds into postal savings). In fiscal year 2003, the Postal Life Insurance Welfare Corporation was dissolved and Japan Post took over its holding assets, including money trusts.

Outline of estimation methods of individual items in this sector

Source data	Assets items		Liabilities items
		Consolidated items	
Of those, extracted from the source data			
Financial statements	Deposits with the Bank of Japan, certificates of deposits, call loans and money, loans by public financial institutions, repurchase agreements and securities lending transactions, local government securities, public corporation securities, bank debentures, industrial securities, outward investment in securities, accounts receivable	outward investment in securities	Transferable deposits, time and savings deposits, accounts payable
The data used in compiling each transaction item	Time and savings deposits, deposits with the Fiscal Loan Fund, treasury discount bills, others	Others	Loans by public financial institutions
Of those, estimated			
Financial statements	[Time and savings deposits—deposits with the Bank of Japan—certificates of deposits—currency for accounts receivable],[central government securities and FILP bonds—treasury discount bills]		
Others			
Consolidated data		Bills purchased, trust beneficiary rights, shares	

Note:

“Central government securities and FILP bonds,” “Local government securities,” “Public corporation securities,” “Bank debentures,” “Industrial securities” and “Shares” are evaluated at a market price (real value basis).

Details on major transaction items in this category:

- Transferable deposits (liabilities side)

"Transferable deposits" refers to the amount outstanding of postal money orders, postal giros, and ordinary savings obtained from the annual report of postal savings service.

- Time and savings deposits (liabilities side)

"Time and savings deposits" refers to the sum of collection savings (including housing savings and education savings), *teigaku* savings (including *teigaku* savings for wage-earner's property accumulation), and time savings less unpaid interests on postal savings obtained from the annual report of postal savings service.

- Loans by public financial institutions (liabilities side)

Figures in this category refer to the end-of-fiscal-year (end of March) outstanding of borrowings by Fiscal Loan Fund, based on *the Fiscal Investment and Loan Program Report*, while the figures in other quarters are estimated by using the growth rate of total assets of the institution and regarding maturity of each loan (based on the annual report of postal saving).

- Central government securities and FILP bonds (assets side)

This category refers to the holding amount of “Central government securities and FILP bonds” (market value basis) in the special accounts for financial deregulation of the Postal Savings Special Accounts (including treasury discount bills), which is obtained from the annual report of postal savings service, etc, less treasury discount bills that are based on the summary sheet of registered government bonds and clearing government bonds for each business.

1-2-3. Collectively managed trusts (last update: October 2011)

“Collectively managed trusts” is mainly compiled by using the financial data on trust assets in every type of accounts. The transaction items that cannot be compiled by this line are alternatively compiled by using the data on *Gensaki* transaction published by Japan Securities Dealers Association (*the Balance of Bond Transactions with Repurchase Agreements <by Investor Type>*).

Outline of estimation methods of individual items in this sector

Source data	Assets items	Liabilities items
Of those, extracted from the source data		
Financial statements	Call loans and money, bills purchased, loans by private financial institutions, local government securities, public corporation securities, industrial securities, shares and other equities, outward investment in securities, other external claims and debts, others	Call loans and money, bills sold, loans by private financial institutions, trust beneficiary rights
Of those, estimated		
Financial statements: Of which, proportional allocation is employed	[Trust beneficiary rights, structured-financing instruments]	
Financial statements:	[Central government securities and FILP bonds – treasury discount bills]	
The data used in compiling each transaction item	Repurchase agreements and securities lending transactions, treasury discount bills	

Notes:

For the items in square brackets, the total is available from financial statements.

“Central government securities and FILP bonds,” “Local government securities,” “Public corporation securities,” “Industrial securities,” and “Shares” are evaluated at a market price (real value basis).

Details on major transaction items in this category:

- Repurchase agreements and securities lending transactions (assets side)

Figures in this category refer to the amount outstanding of central government securities and FILP bonds (including treasury discount bills) in *Gensaki* transaction that is based on the data on *Gensaki* transaction published by Japan Securities Dealers Association (*the Balance of Bond Transactions with Repurchase Agreements <by Investor Type>*)²³.

- Treasury discount bills (assets side)

This category is based on the summary sheet of registered government bonds and clearing government bonds for each business. Certain adjustment is conducted in order to retrieve the state before the transaction with repurchase agreements²⁴.

- Central government securities and FILP bonds (assets side)

This category refers to the central government securities and FILP bonds recorded in the financial statement of this sector (including treasury discount bills) less treasury discount bills that are estimated separately. Figures are converted from the book value basis to the market value basis.

1-3. Insurance and pension funds (last update: August 2006)

“Insurance and pension funds” equals the sum of “Insurance” and “Pension funds.”

1-3-1. Insurance (last update: August 2006)

“Insurance” equals the sum of “Life insurance,” “Nonlife insurance,” and “Mutual aid insurance.”

1-3-1-1. Life insurance (last update: August 2006)

“Life insurance” equals the sum of “Private life insurance companies” and “Postal life insurance.”

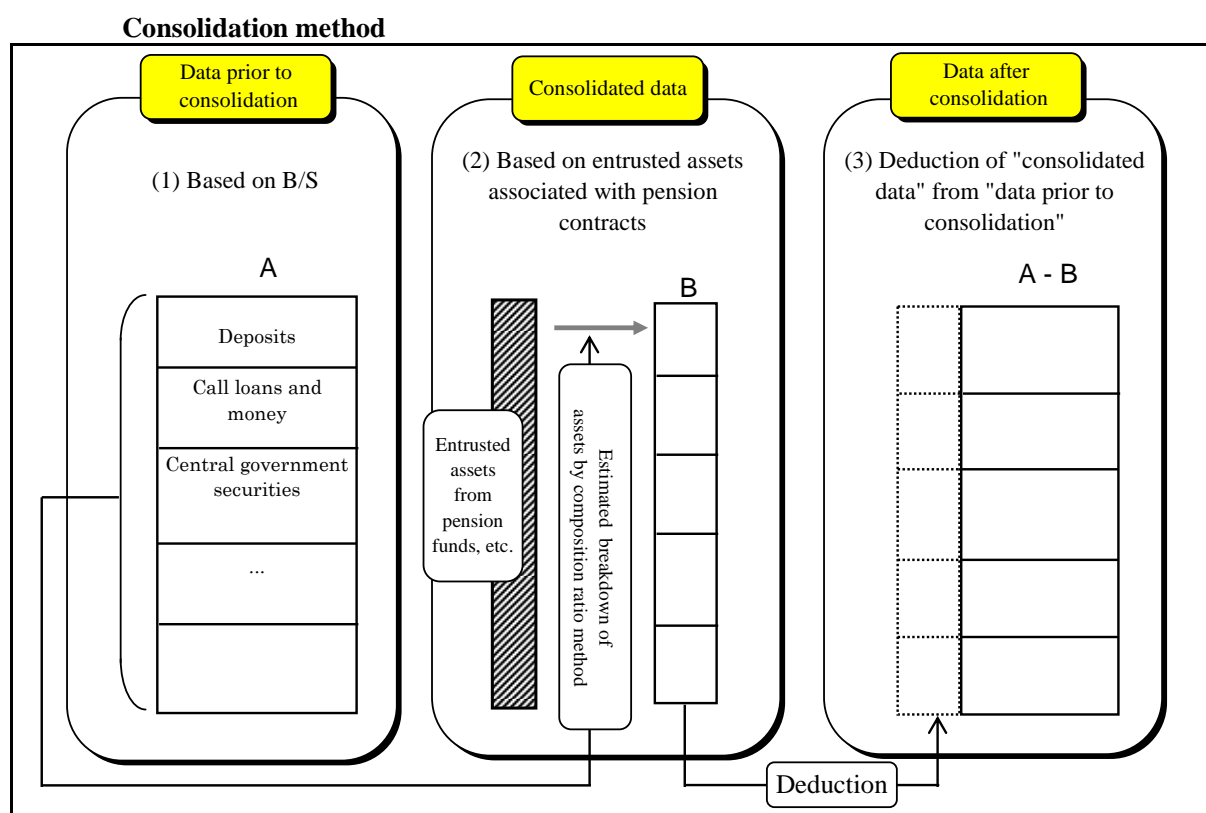
²² The FFA employs “trust banks” in this statistics to estimate the figures in this category by applying proportional allocation with noncollectively-managed trusts.

²⁴ *Gensaki* transaction held by this sector is estimated by allocating the total amount outstanding of *Gensaki* transaction, based on the data on money market operation of the Bank of Japan, proportionally by using the composition ratio of treasury discount bills held by those who participate the money market operation (based on the summary sheet of registered government bonds and clearing government bonds).

1-3-1-1-1. Private life insurance companies (Before the 3rd quarter of 2007) (last update: October 2013)

Assets and liabilities prior to the consolidation are estimated mainly based on the financial statements and the summary data of investment assets, while statistics on loans (*the Loans to individuals <Housing funds>*), etc are used for estimating transaction items. “Private life insurance companies” is posted as the residual of deducting the entrusted funds associated with group pension insurance (that are consolidated into the original investing entities such as employees’ pension funds, the Government Pension Investment Fund, and etc.) from the financial assets and liabilities prior to the consolidation.

The entrusted assets subject to the consolidation are based on the data on the entrusted assets associated with pension contracts and the financial statements of each trust²⁵. The breakdown of investment assets is estimated by assuming that the composition of entrusted assets is identical to the asset-mix of private life insurance companies (composition ratio method).



²⁵ The entrusted assets subject to the consolidation in this category include corporate pensions (employees’ pension funds, former qualified retirement pension plans, defined contribution pension and defined benefit pension), other pensions (the National Pension Fund, The Retirement Allowance Mutual Aid Corporation of Medium and Small Enterprises of the Organization for Workers Retirement Allowance Mutual Aid, and the small-scale enterprise mutual aid account of Organization for Small & Medium Enterprises and Regional Innovation ,Japan), and social security funds (a part of Government Pension Investment Fund < the former pension fund account of the Pension Welfare Service Public Corporation>, and long-term accounts of mutual aid associations).

Outline of estimation methods of individual items in this sector

Outline of estimation methods of individual items in this sector			
Source data	Assets items (Consolidated items)	Liabilities items	
			Consolidated items
Of those, extracted from the source data			
Financial statements	Currency, loans by private financial institutions, repurchase agreements and securities lending transactions, local government securities, public corporation securities, bank debentures, industrial securities, external securities issued by residents, CP, structured-financing instruments, financial derivatives, deposits money, accounts receivable, others	Loans by private financial institutions, repurchase agreements and securities lending transactions, CP, external securities issued by residents, industrial securities, shares and other equities, financial derivatives, insurance and pension reserves, deposits money, accounts payable, others	Insurance and pension reserves
The data used in compiling each transaction item	Call loans and money, bills purchased		
Of those, estimated			
Financial statements: Of which, proportional allocation is employed	[Transferable deposits, time and savings deposits, certificates of deposit, foreign currency deposits] [Investment trust beneficiary certificates, trust beneficiary rights] [Outward investment in securities, other external claims and debts]		
Financial statements:	[Central government securities and FILP bonds – treasury discount bills]		
The data used in compiling each transaction item	Treasury discount bills, shares and other equities	Installment credit	

Notes:

For the items in square brackets, the total is available from financial statements.

“Loans by private financial institutions,” “Central government securities and FILP bonds,” “Local government securities,” “Public corporation securities,” “Bank debentures,” “Industrial securities,” “Investment trust beneficiary certificates,” and “Shares” are evaluated at a market price (real value basis).

Details on major transaction items in this category:

- Transferable deposits, time and savings deposits, certificates of deposit and foreign currency deposits (assets side)

The sum of these items is based on the financial statement. The amounts are allocated proportionally to each instrument, assuming the composition ratio of deposits in this category is identical to the one in mutual aid insurance.

- Loans by private financial institutions (assets side)

This category is based on financial statement. Loans to companies and governments (on a real value) is calculated by the residual, which is the remaining after deducting housing loans and consumer credits (based on *the Loans to Individuals <Housing Fund>*, etc) from the total value estimated from the financial statement, less the allowances for individual uncollectibles²⁶. Decrease in book value of the loans, caused by direct write-offs (including draw-downs on the allowances), is not recorded in the transaction flow. The difference between the term-on-term difference of the amount outstanding and the transaction flow (this is relevant to the amount of direct write-off and write-downs) is posted in the Reconciliation Table.

- Repurchase agreements and securities lending transactions (assets/liabilities side)

This category records the sum of the amount outstanding of repurchase agreements and securities lending transactions based on financial statements.

- Treasury discount bills (assets side)

This category is based on the summary sheet of registered government bonds and clearing government bonds for each business. Certain adjustment is conducted in order to retrieve the state before the transaction with repurchase agreements²⁷.

- Central government securities and FILP bonds, local government securities, public corporation securities, bank debentures, industrial securities and external securities issued by residents (assets side)

Each category records the amount outstanding on a market value basis. The market value of each type of security is calculated by adding holding gains and losses to book value, whose source data are obtained from summary sheets.

- Investment trust beneficiary certificates (assets side)

This category records a part of "Other securities" in financial statements.

- Structured financing instruments (assets side)

This category records the sum of the amount outstanding of asset-backed securities, asset-backed *samurai* bonds, and trust beneficiary rights backed by monetary claims based on summary sheets.

- Financial derivatives (assets/liabilities side)

The amount outstanding in this category is based on financial statements²⁸. Since the

²⁶ Until end of March 2000, total allowance for individual uncollectibles of life insurance companies was estimated by using percentage of allowance for individual uncollectibles to a loan outstanding in major life insurance companies.

²⁷ *Gensaki* transaction held by this sector is estimated by allocating the total amount outstanding of *Gensaki* transaction, based on the data on money market operation of the Bank of Japan, proportionally by using the composition ratio of treasury discount bills held by those who participate the money market operation (based on the summary sheet of registered government bonds and clearing government bonds).

²⁸ Until 2nd quarter 2000, difference in the acquisition cost of the option premium (the amount outstanding that is not reflected by the fluctuation of market price) during the term was recorded as transaction flow.

source data is available only once in a half year (end of March, and end of September), the amounts in other quarters are estimated by using the Exchange market data (*the Trading Volume and Open Interest of Options on Three-Month Euroyen Futures*) to calculate the growth of amount outstanding of open interest in that quarter.

- Outward investment in securities (assets side)

This category records the outstanding amount of outward investment in securities on a market value basis based on summary sheets.

- Others (assets side)

“Others” refers to a part of the monetary claims purchased and relevant assets in other categories based on the financial statement.

- Loans by private financial institutions (liabilities side)

Equities refer to all borrowings recorded in the financial statement, assuming these are loans by private financial institutions.

- Installment credit (liabilities side)

“Installment credit” is estimated by multiplying the holding amount of installment credits of finance companies (based on the financial statement) by the composition ratio of credits to private life insurance companies.

- Shares and other equities (liabilities side)

Other equities refer to shareholders’ equities and capital reserves in life insurance companies in the form of joint-stock corporation where they are based on “Capitals and basic funds” recorded in the financial statement.

- Insurance and pension reserves (liabilities side)

“Insurance and pension reserves” refers to liability reserves less catastrophe loss reserves, unearned premium reserves (as both of them are reserves for insurance other than saving type), and the amount outstanding of entrusted funds associated with group pension insurance (estimated from the data on entrusted assets associated with pension contracts and the financial statement of each trustee). Reserves for dividend to policyholders of personal insurance and pension insurance are also included in this category. Among the above data, liability reserves and reserves for dividend to policyholders associated with personal pension insurance are classified in “Pension reserves,” while the residuals are classified in “Insurance reserves.” Since the figures for the reserves are available only at the end of fiscal year, the figures for other quarters are estimated by using the growth rate of reserves in the past. After the figures for reserves are obtained, the estimated figures for the past year will be retroactively revised when the retroactive revision is conducted.

1-3-1-1-2. Postal life insurance (Before the 3rd quarter of 2007) (last update: December 2012)

For the calculation of “Postal life insurance,” financial assets and liabilities prior to the consolidation are estimated by using the financial statement for Japan Post Insurance (former Postal Life Insurance Service). Subsequently, entrusted assets are consolidated into the postal life insurance sector by each item of assets²⁹.

More specifically, the breakdown of investment assets in trust account is estimated by multiplying the amount outstanding of trust beneficiary rights by the weight of each investment asset to the whole investment assets (composition ratio method), assuming the composition of investment assets in trust account is identical to the asset-mix of investment assets (the designated noncollectively invested money trusts).

The transaction items that cannot be compiled by this line are alternatively compiled by using the summary sheet of registered government bonds and clearing government bonds for each business, and the data on the amount outstanding of deposits with Fiscal Loan Fund (*the Monthly Report of Fiscal Loan Fund*).

²⁹ Until fiscal year 2002, loans and entrusted funds to the Special Account for Fund-Management Operations in the Postal Life Insurance Welfare Corporation were consolidated into Postal life insurance sector by estimating the composition of investment assets in the account. The postal life insurance sector also includes the assets held by those other than the trust accounts of the Special Accounts (i.e. the designated noncollectively invested money trusts). In fiscal year 2003, the Postal Life Insurance Welfare Corporation was dissolved and Japan Post took over its holding assets, including money trusts.

Outline of estimation methods of individual items in this sector

Outline of estimation methods of individual items in this sector			
Source data	Assets items		Liabilities items
		Consolidated items	
Of those, extracted from the source data			
Financial statements	Deposits with the Bank of Japan, time and savings deposits, certificates of deposits, foreign currency deposits, Loans by public financial institutions, local government securities, public corporation securities, bank debentures, industrial securities, CP, trust beneficiary rights, shares and other equities, accounts receivable, outward investment in securities, others	Time and savings deposits, loans by public financial institutions, bank debentures, industrial securities, shares and other equities, outward investment in securities, others	Insurance and pension reserves, accounts payable
The data used in compiling each transaction item	Deposits with the Fiscal Loan Fund, treasury discount bills		
Of those, estimated			
Financial statements:	[Central government securities and FILP bonds – treasury discount bills]	Central government securities	
Others			
Consolidated data		Call loans and money, bills purchased ,trust beneficiary rights	

Notes:

For the items in square bracket, the total is available from financial statements.

“Central government securities and FILP bonds,” “Local government securities,” “Public corporation securities,” “Bank debentures,” “Industrial securities,” and “Shares” are evaluated at a market price (real value basis).

Details on major transaction items in this category:

- Central government securities and FILP bonds (assets side)

This category refers to the central government securities and FILP bonds recorded in the financial statement (including treasury discount bills), less treasury discount bills that are estimated separately by using the summary sheet of registered government bonds and clearing government bonds for each business. Figures are converted from the book value basis to the market value basis.

- Insurance and pension reserves (liabilities side)

“Insurance and pension reserves” refers to liability reserves (excluding catastrophe loss reserves and unearned premium reserves) and reserves for policyholder dividends. Among the above data, liability reserves and reserves for dividend to policyholders associated with personal pension insurance are classified in “Pension reserves,” while the residuals are classified in “Insurance reserves.” Since the figures are available only at the end of year, the figures for other quarters are estimated by using the growth rate of reserves in the past.

The estimated figures for the past year will be retroactively revised when the next figures for the reserves are obtained.

1-3-1-2. Nonlife insurance (last update: August 2006)

“Nonlife insurance” equals the sum of “Private nonlife insurance companies” and “Other nonlife insurance.”

1-3-1-2-1. Private nonlife insurance companies (last update: August 2014)

"Private nonlife insurance companies" is mainly compiled by using financial statements and the summary sheets of investment assets. Transaction items that cannot be compiled using these data are alternatively compiled by using other data sources such as the statistics on loans (*Loans to individuals <Housing funds >*).

Due to the limitations of source data, as only the-end-of-fiscal half year values are available, deposits money and accounts receivable (assets side) in this category employ the same values of the previous quarters.

Outline of estimation methods of individual items in this sector

Source data	Assets items	Liabilities items
Of those, extracted from the source data		
Financial statements	Currency, call loans and money, loans by private financial institutions, repurchase agreements and securities lending transactions, local government securities, public corporation securities, bank debentures, industrial securities, external securities issued by residents, CP, structured-financing instruments, mortgage securities, financial derivatives, deposits money, accounts receivable	Loans by private financial institutions, repurchase agreements and securities lending transactions, industrial securities, external securities issued by residents, CP, financial derivatives, insurance reserves, deposits money, accounts payable
The data used in compiling each transaction item	Treasury discount bills	
Of those, estimated		
Financial statements: Of which, proportional allocation is employed	[Transferable deposits, time and savings deposits, certificates of deposit, foreign currency deposits] [Investment trust beneficiary certificates, trust beneficiary rights] [Outward investment in securities, other external claims and debts]	Shares and other equities
Financial statements:	[Central government securities and FILP bonds – treasury discount bills]	
The data used in compiling each transaction item	Shares and other equities, others	Installment credit

Notes:

For the items in square brackets, the total is available from financial statements.

“Loans by private financial institutions,” “Central government securities and FILP bonds,” “Local government securities,” “Public corporation securities,” “Bank debentures,” “Industrial securities,” “Investment trust beneficiary certificates,” and “Shares” are evaluated at a market price (real value basis).

Details on major transaction items in this category:

- Transferable deposits, time and savings deposits, certificates of deposit and foreign currency deposits (assets side)

The sum of these items is based on the financial statement. The amount is allocated proportionally to each instrument by assuming that the composition ratio of deposits in this category is identical to the one in mutual aid insurance.

- Loans by private financial institutions (assets side)

This category is based on financial statement. Loans to companies and governments (on a real value) is calculated by the residual, which is the remaining after deducting housing loans (based on *the loans to individuals <Housing Fund>*, etc) from the total value estimated from the financial statement, less the allowances for individual uncollectibles³⁰. Decrease in

³⁰ Until the end of March 2000, total allowance for individual uncollectibles of non-life insurance companies was estimated by using percentage of allowance for individual uncollectibles to a loan outstanding in major life insurance companies.

book value of the loans, caused by direct write-offs (including draw-downs on the allowances), is not recorded in the transaction flow. The difference between the term-on-term difference of the amount outstanding and the transaction flow (this is relevant to the amount of direct write-off and write-downs) is posted in the Reconciliation Table.

- Treasury discount bills (assets side)

This category is based on the summary sheet of registered government bonds and clearing government bonds of each business.

- Central government securities and FILP bonds (assets side)

This category refers to the sum of transaction items of those regarded as central government securities and FILP bonds (including treasury discount bills) less treasury discount bills that are estimated separately³¹. Figures are converted to a market value basis from a book value basis.

- Investment trust beneficiary certificates and trust beneficiary rights (assets side)

The sum of these items is based on “Other securities” recorded in the financial statement that is allocated proportionally to each item. “Trust beneficiary rights” in this category refers to the allocated amounts plus pecuniary trusts.

- Financial derivatives (assets/liabilities side)

The amount outstanding in this category is based on the financial statement.

- Outward investment in securities, other external claims and debts (assets side)

The sum of these items is based on “Foreign securities held” in the financial statement that is allocated proportionally to each instrument by using the ratio acquired from individual questionnaires.

- Others (assets side)

“Others” refers to a part of the monetary claims purchased and relevant assets in other categories based on the financial statement.

- Loans by private financial institutions (liabilities side)

This category refers to all borrowings recorded in the financial statement, assuming these are the loans by private financial institutions.

- Installment credit (liabilities side)

“Installment credit” is estimated by multiplying the holding amount of installment credits of finance companies (based on the financial statement) by the composition ratio of credits to private nonlife insurance companies.

³¹ Unidentifiable type of securities (trading securities, trading securities loaned) is assumed to be a part of central government securities and FILP bonds.

- Shares and other equities (liabilities side)

The total amount of outstanding shares is evaluated at a market price based on individual company data on number of shares and stock price.³² Each company is in the sector of “Insurance” listed on the Stock Exchange market. Transaction flow is calculated by taking the sum of amounts of equity raised by issuing new stocks and exercised amounts of bonds with right to reserve new stock based on the data on fund raising in the stock market.

1-3-1-2-2. Other nonlife insurance (last update: August 2006)

“Other nonlife insurance” is mainly compiled by using the financial statement of each insurance special account, such as the Forest Insurance Special Account and credit insurance institutions³³.

Due to the limitations of source data, special accounts in this category employ the same values as the one of previous quarter, as only the-end-of-year values are available.

Outline of estimation methods of individual items in this sector

Source data	Assets items	Liabilities items
Of those, extracted from the source data		
Financial statements	Time and savings deposits, loans by private financial institutions, loans by public financial institutions, bank debentures, shares and other equities, accounts receivable, others	Loans by public financial institutions, shares and other equities, insurance reserves, accounts payable, others
The data used in compiling each transaction item	Deposits with the Fiscal Loan Fund	

Note:

“Bank debentures” are evaluated at a market price (real value basis).

³² Before 2004, “insurance” in the source data, “the Market Value by Types of Industry—which shows data on the total amounts of shares and equities evaluated at a market value of the Stock Exchange and OTC- registered stock market, is assumed to be identical to private nonlife insurance companies. However, because source data is no longer disseminated, the compilation method has been changed by estimating the figures based on the individual company’s source data.

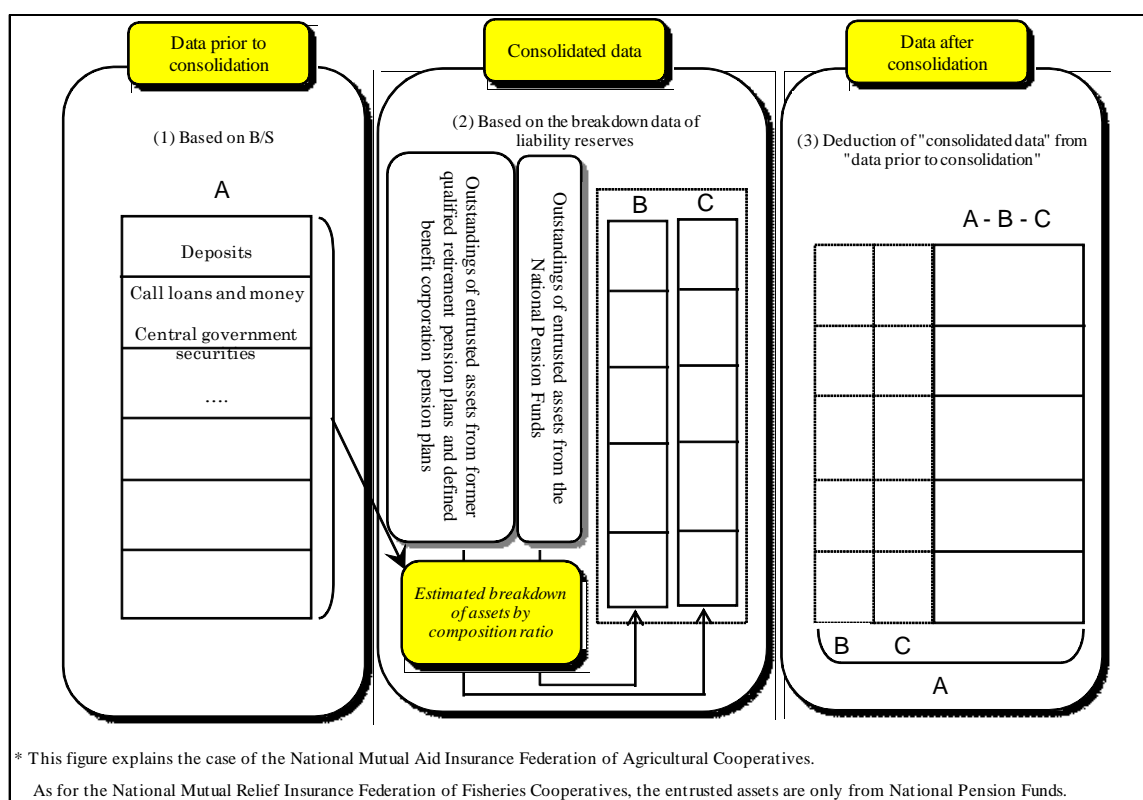
³³ Government deposits in “currency deposits” recorded in the financial statements are included in “others” in the FFA, assuming these as claims/debts to the Treasury (where the Treasury is classified in central government of the FFA).

1-3-1-3. Mutual aid insurance (last update: October 2013)

“Mutual aid insurance” is calculated residually by following process. First, financial assets and liabilities in this sector prior to the consolidation are estimated by using the financial statements and the breakdown data on liability reserves of each institution³⁴. Then, the portion held by this sector is posted as residual after deducting the entrusted funds³⁵ associated with group pension insurance (that are consolidated into the original investing entity such as former qualified retirement pension plans defined benefit plans, and the National Pension Fund).

The entrusted assets subject to the consolidation are based on the micro data on liability reserves. The breakdown of investment assets is estimated by assuming that the composition of entrusted assets is identical to the asset-mix of the National Mutual Aid Insurance Federation of Agricultural Cooperatives and the National Mutual Relief Insurance Federation of Fisheries Cooperatives (composition ratio method).

Consolidation method



³⁴ The National Mutual Aid Insurance Federation of Agricultural Cooperatives, National Mutual Relief Insurance Federation of Fisheries Cooperatives, National Federation of Workers and Consumers Insurance Cooperatives, and Federation of Prefectural Workers and Consumers Insurance Cooperatives.

³⁵ The National Mutual Aid Insurance Federation of Agricultural Cooperatives receives pension funds from former qualified retirement pension funds, National Pension Funds and defined benefit plans. The National Mutual Relief Insurance Federation of Fisheries Cooperatives receive pension funds from National Pension Funds.

Outline of estimation methods of individual items in this sector

Outline of estimation methods of individual items in this sector			
Source data	Assets items (Consolidated items)	Liabilities items	
			Consolidated items
Of those, extracted from the source data			
Financial statements	Currency, transferable deposits, time and savings deposits, certificates of deposit, foreign currency deposits, call loans and money, bills purchased, loans by private financial institutions, local government securities, public corporation securities, bank debentures, industrial securities, external securities issued by residents, CP, investment trust beneficiary certificates, trust beneficiary rights, structured-financing instruments, mortgage securities, shares and other equities, deposits money, accounts receivable, outward investment in securities, others	Loans by private financial institutions, shares and other equities, insurance and pension reserves, deposits money, accounts payable, others	Insurance and pension reserves
The data used in compiling each transaction item	Treasury discount bills		
Of those, estimated			
Financial statements:	[Central government securities and FILP bonds – treasury discount bills]		

Notes:

For the items in square brackets, the total is available from financial statements.

“Central government securities and FILP bonds,” “Local government securities,” “Public corporation securities,” “Bank debentures,” “Industrial securities,” “Investment trust beneficiary certificates,” and “Shares” are evaluated at a market price.

Details on major transaction items in this category:

- Treasury discount bills (assets side)

This category is based on the summary sheet of registered government bonds and clearing government bonds of each business.

- Central government securities and FILP bonds (assets side)

This category refers to central government securities and FILP bonds (including treasury discount bills) that are based on the financial statements less treasury discount bills that are estimated separately. Figures are converted to market value basis from book value basis.

- Insurance and pension reserves (liabilities side)

“Insurance and pension reserves” refers to liability reserves less catastrophe loss reserves, unearned premium reserves (as both of them are reserves for insurance other than saving type), and the entrusted funds associated with the National Pension Funds³⁶. Moreover,

³⁶ The National Mutual Aid Insurance Federation of Agricultural Cooperatives is entrusted to manage pension funds from

liability reserves associated with personal pension mutual insurance are also compiled. The figure is then deducted from the total to obtain insurance reserves. Since the data on liability reserves is available only at the end of year, the data for other quarters are estimated respectively.

1-3-2. Pension funds (last update: August 2006)

“Pension funds” equals the sum of “Corporate pensions” and “Other pensions.”

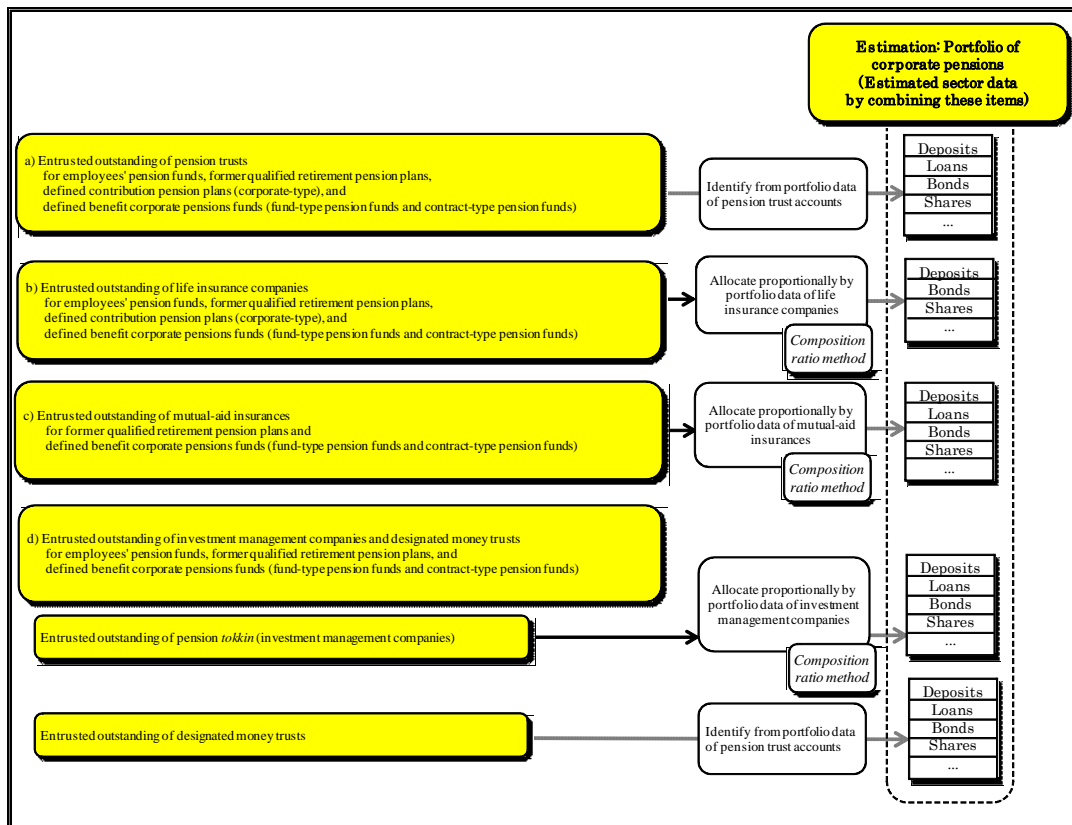
1-3-2-1. Corporate pensions (last update: October 2013)

Entrusted assets of employees’ pension funds, former qualified retirement pension plans³⁷, defined contribution pension plans (corporate-type), and defined benefit corporate pensions funds (fund-type pension funds and contract-type pension funds) in “Corporate pensions,” which are posted under the liabilities side of pension reserves, are based on the data on pension contracts. Also, unfunded retirement benefit obligations are recorded as pension reserves based on consolidated financial statements of listed companies. Figures are compiled by consolidating the portfolio of each institution’s entrusted funds that is based on the financial statement of each type of entrusted institutions.

former qualified retirement pension funds, defined benefit corporation pension funds, and the National Pension Funds, while the National Mutual Relief Insurance Federation of Fisheries Cooperatives is from the National Pension Funds. These entrusted assets (and corresponding pension reserves) need to be consolidated and posted under “pension funds” and therefore, associated pension reserves are deducted from this sector.

³⁷ Qualified retirement pension plans were repealed in March 2012.

Consolidation method



Outline of estimation methods of individual items in this sector

Source data	Assets items (Consolidated items)	Liabilities items
Of those, extracted from the source data		
Financial statements		Pension reserves
Others		
Financial statements: Of which, proportional allocation is employed	Currency, transferable deposits, time and savings deposits, certificates of deposit, foreign currency deposits, call loans and money, bills purchased, loans by private financial institutions, repurchase agreements and securities lending transactions, treasury discount bills, central government securities and FILP bonds, local government securities, public corporation securities, bank debentures, industrial securities, external securities issued by residents, CP, investment trust beneficiary certificates, trust beneficiary rights, structured-financing instruments, mortgage securities, shares and other equities, financial derivatives, deposits money, accounts receivable, outward investment in securities, other external claims and debts, others	Financial derivatives

Notes:

“Central government securities and FILP bonds,” “Local government securities,” “Public corporation securities,” “Bank debentures,” “Industrial securities,” “Investment trust beneficiary certificates,” and “Shares” are evaluated at a market price.

Details on major transaction items in this category:

- Pension reserves (liabilities side)

This category refers to the sum of those entrusted to trust accounts of domestically licensed banks (pension trusts <based on the financial data of trust accounts>), private life insurance companies, the National Mutual Aid Insurance Federation of Agricultural Cooperatives, investment management companies (pension *tokkin*), and unfunded retirement benefit obligations based on consolidated financial statements of listed companies. Among former qualified retirement pension plans, data on the portion entrusted to private life insurance companies and to the National Mutual Aid Insurance Federation of Agricultural Cooperatives are available only at the end of year; the data for other quarters are thus estimated. Specifically, for the portion entrusted to private life insurance companies, the growth rate of entrusted assets of group annuities (new Insured Pension Plans) including former qualified retirement pension plans, is used. For the National Mutual Aid Insurance Federation of Agricultural Cooperatives, the growth rate of holding assets is used.

- Accounts receivable/payable (assets side)

Unfunded retirement benefit obligations are recorded as pension reserves (liabilities side). Then the same amount is recorded as accounts receivable/payable (assets side).

- All items subject to the consolidation (assets side)

The portion entrusted to trust account of domestically licensed banks (employees' pension funds, former qualified retirement pension plans, defined benefit corporate pensions funds <fund-type pension funds and contract-type pension funds>, and defined contribution pension plans <corporate-type>) is based on the portfolio data of each contracts. The portion reinvested to pension investment funds³⁸ is estimated by using the fraction of corporate pensions in pension trusts.

The portion entrusted to private life insurance companies and the National Mutual Aid Insurance Federation of Agricultural Cooperatives is estimated by multiplying the total of entrusted assets³⁹ by the weight of asset-mix of the whole investment assets.

The portion entrusted to pension *tokkin* (investment management companies) is estimated by multiplying the total of entrusted assets by the weight of asset-mix of the whole investment assets.

³⁸ Pension investment funds refer to designated money trusts that reinvest funds by collecting the investment assets from each pension trust, for the reason that the fund managements to stocks from each of trusts (former qualified retirement pension plan trusts, employees' pension fund trust accounts, defined benefit corporate pensions funds <fund-type pension funds and contract-type pension funds>, and national pension fund trust) do not create efficient returns.

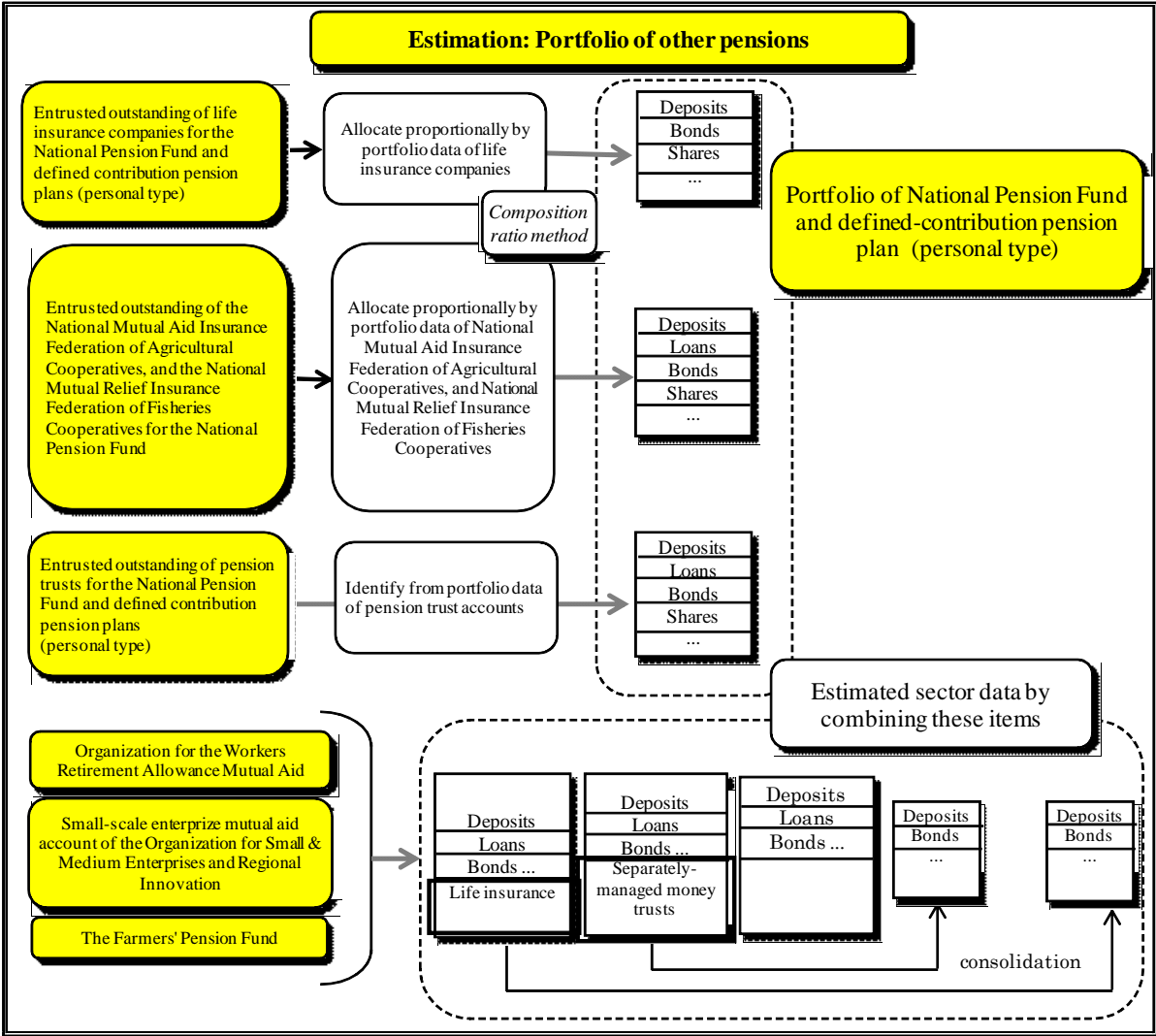
³⁹ Include the portion entrusted to private insurance companies that are estimated by the surpluses during the management process.

1-3-2-2. Other pensions (last update: October 2013)

“Other pensions” equals the sum of (1) the National Pension Fund, defined contribution pension plans (personal type) and (2) other institutions (the Organization for Workers Retirement Allowance Mutual Aid, the small-scale enterprise mutual aid account of the Organization for Small & Medium Enterprises and Regional Innovation, and Farmers' Pension Fund).

- (1) The National Pension Fund and defined contribution pension plans (personal type)
Entrusted asset of the National Pension Fund and defined contribution pension plans (personal type), which is posted under the liabilities side of liability reserves, is based on the data on pension contracts. Figure is compiled by consolidating each portfolio data by transaction of each institution that is based on the financial statement of each type of entrusted institutions.
- (2) The Organization for Workers Retirement Allowance Mutual Aid, the small-scale enterprise mutual aid account of the Organization for Small & Medium Enterprises and Regional Innovation, and Farmers' Pension Fund
For the institutions other than the National Pension Fund and defined contribution pension plans (personal type), each transaction item is based on the financial statement. Designated noncollectively invested money trusts and life insurance assets, held by the Organization for Workers Retirement Allowance Mutual Aid, and the small-scale enterprise mutual aid account of the Organization for Small & Medium Enterprises and Regional Innovation are consolidated from trust companies and private life insurance companies to this sector. For the consolidation, the breakdown of each item is estimated by multiplying the amount outstanding of entrusted assets by the asset-mix that is based on the financial statement of fiduciary institutions (composition ratio method).

Consolidation method



Outline of estimation methods of individual items in this sector

Outline of estimation methods of individual items in this sector			
Source data	Assets items		Liabilities items
		Consolidated items	
Of those, extracted from the source data			
Financial statements	Currency, transferable deposits, time and savings deposits, certificates of deposit, deposits with the Fiscal Loan Fund, loans by private financial institutions, loans by public financial institutions, central government securities and FILP bonds, local government securities, public corporation securities, bank debentures, industrial securities, investment trust beneficiary certificates, trust beneficiary rights, shares and other equities, deposits money, accounts receivable, outward investment in securities	Currency, transferable deposits, time and savings deposits, certificates of deposit, loans by private financial institutions, loans by public financial institutions, central government securities and FILP bonds, local government securities, public corporation securities, bank debentures, industrial securities, investment trust beneficiary certificates, trust beneficiary rights, shares and other equities, deposits money, accounts receivable, outward investment in securities	Loans by private financial institutions, loans by public financial institutions, public corporation securities, shares and other equities, pension reserves, deposits money, accounts payable
The data used in compiling each transaction item	Deposits with the Fiscal Loan Fund		
Others			
Consolidated data		Foreign currency deposits, call loans and money, bills purchased, repurchase agreements and securities lending, treasury discount bills, external securities issued by residents, CP, structured- financing instruments, mortgages securities, other external claims, others	

Notes:

“Central government securities and FILP bonds,” “Local government securities,” “Public corporation securities,” “Bank debentures,” “Industrial securities,” “Investment trust beneficiary certificates,” and “Shares” are evaluated at a market price.

Details on major transaction items in this category:

- Pension reserves (liabilities side)

For pension reserves of the National Pension Fund and defined contribution pension plans (personal type), the portion entrusted to trust account of domestically licensed banks, private life insurance companies, the National Mutual Aid Insurance Federation of Agricultural Cooperatives, and investment management companies (pension *tokkin*) are based on the data on entrustments and the financial statement.

For institutions other than the National Pension Fund and defined contribution pension plans (personal type), liability reserves in respective financial statements are posted.

- All items subject to the consolidation (assets side)

For the investment assets of the National Pension Trust and defined contribution pension plans (personal type), the portion entrusted to trust management companies is based on the data on breakdowns of entrusted assets. The portion reinvested to pension investment funds⁴⁰ is estimated by allocating the fraction of National Pension Trust in all pension trusts.

The portion entrusted to private life insurance companies, the National Mutual Aid Insurance Federation of Agricultural Cooperatives, and the National Mutual Relief Insurance Federation of Fisheries Cooperatives is estimated by calculating each entrusted assets by allocating the fraction of the National Pension Trust of all their assets.

The portion entrusted to investment management companies (pension *tokkin*) is estimated by multiplying the total entrusted assets by the weight of each asset in the whole investment assets.

1-4. Other financial intermediaries (last update: July 2010)

“Other financial intermediaries” equals the sum of “Securities investment trusts,” “Nonbanks,” “Public financial institutions,” and “Financial dealers and brokers.”

1-4-1. Securities investment trusts (last update: August 2006)

“Securities investment trusts” equals the sum of “Bond investment trusts (including MMF and MRF)” and “Stock investment trusts.”

1-4-1-1. 2. Bond investment trusts (including MMF and MRF) and stock investment trusts (last update: December 2012)

For “Bond investment trusts,” “Stock investment trusts” and data for MMF, financial assets/ liabilities and breakdowns of each investment asset, which are evaluated on a market price, are based on the data on net assets of securities investment trusts and the summary data of each investment asset. As for MRF included in “Of which: MMF, MRF” (breakdown of “Bond investment trusts”), data are estimated by assuming that the composition of investment assets in MRF is identical to the one in MMF.

Transaction flows for bonds (central government securities and FILP bonds, local government securities, public corporation securities, bank debentures, and industrial securities) are estimated using term-on-term differences of term-end outstanding, which is

⁴⁰ Pension investment funds refer to designated money trusts that reinvest funds by collecting the investment assets from each pension trust, for the reason that the fund managements of each of trusts (former qualified retirement pension plan trusts, employees’ pension fund trusts, defined benefit corporate pensions funds <fund-type pension funds and contract-type pension funds>, and national pension fund trust) that invest to stocks does not create efficient returns.

converted to face value by using a market-price-to-face-value ratio. Shares, on the other hand, are estimated using the data on trading by investors in the stock market (*the Trading Volume & Value by Types of Investors*). Besides, outward investment in securities is based on the data of outward portfolio investment by type of investors (*Balance of Payments Statistics*), in which the amount invested by investment trust management companies is shown as one sector. The other transaction amount of assets is estimated by using the term-on-term difference of the term-end outstanding based on the aggregated data from the summary data of each investment asset.

The securities investment trusts sector excludes assets and liabilities of "Fund of funds," which invests in other investment trusts.

Outline of estimation methods of individual items in this sector

Source data	Assets items	Liabilities items
Of those, extracted from the source data		
Financial statements	Shares and other equities	Investment trust beneficiary certificates, accounts payable
The data used in compiling each transaction item	Repurchase agreements and securities lending	Repurchase agreements and securities lending
Of those, estimated		
Financial statements: Of which, proportional allocation is employed	[Transferable deposits, certificates of deposit, foreign currency deposits, call loans and money, bills purchased, central government securities and FILP bonds, local government securities, public corporation securities, bank debentures, industrial securities, CP, trust beneficiary rights, accounts receivable, others]	
The data used in compiling each transaction item	Treasury discount bills, structured-financing instruments, financial derivatives, outward investment in securities	Financial derivatives

Notes:

For the items in square brackets, the total is available from financial statements.

"Central government securities and FILP bonds," "Local government securities," "Public corporation securities," "Bank debentures," "Industrial securities," "Investment trust beneficiary certificates," and "Shares" are evaluated at a market price (real value basis).

Details on major transaction items in this category:

- Repurchase agreements and securities lending transactions (assets/liabilities side)

This category refers to the amount outstanding of central government securities and FILP bonds in *Gensaki* transaction that is based on the data on *Gensaki* transaction published by Japan Securities Dealers Association (*the Balance of Bond Transactions with Repurchase Agreements <by Investor Type>*).

- Financial derivatives (assets/liabilities side)

The amount outstanding of OTC-traded derivatives in this category is based on *the Central Bank Survey of Foreign Exchange and Derivatives Market Activity* and *the Results of the Regular Derivatives Market Statistics in Japan*. Firstly, amount outstanding of transaction

with non-financial institutions' customers held by domestically licensed banks is estimated, and deduct the transaction with finance companies⁴¹. The remainder is allocated proportionally to each of corporate pensions (pension trusts), securities investment trusts, and private nonfinancial corporations.

The amount outstanding of Exchange-traded derivatives is estimated by multiplying the amount outstanding of financial derivatives held by domestically licensed banks by the weight of transaction volume to domestically licensed banks. The weight is calculated by using Exchange market data (*the Key Statistics for Government Bond Futures & Trading of Nikkei 225 Options by Type of Investors* and *the Trading Volume and Open Interest of Options on Three-Month Euroyen Futures*).

1-4-2. Nonbanks (last update: August 2006)

“Nonbanks” equals the sum of “Finance companies” and “Structured-financing special purpose companies (SPCs) and trusts.”

1-4-2-1. Finance companies (last update: October 2013)

“Finance companies” equals the sum of financial assets/liabilities in (1) money lending companies, (2) the Resolution and Collection Corporation (excluding those recorded in “Financial institutions for small businesses”), (3) securities finance companies, (4) Industrial Revitalization Corporation of Japan (disbanded in March 2007), and (5) venture capitals. For transferable deposits, time and savings deposits, and foreign currency deposits, figures are allocated proportionally to these items after taking the total of “Finance companies”⁴².

Estimation method for each entity is as follows.

(1) Money lending companies

Financial assets and liabilities⁴³ are estimated by using the financial statement of major money lending companies. More specifically, the total of financial assets and liabilities of the entire sector is estimated by multiplying each item recorded in the financial statement by the ratio of loans of major companies to loans of all companies, for each business of money lending companies ((a) money lending companies to consumers, (b) money lending companies to entrepreneurs, (c) credit card companies, credit sales companies, money lending companies affiliated to retailers, and money lending companies affiliated to manufacturers, and (d) leasing companies).

⁴¹ Non-financial institution customers refer to “customers other than financial institutions (including domestically licensed banks and trust accounts).” In the FFA, these customers correspond to “corporate pensions” (pension trusts), “securities investment trusts,” “finance companies,” and “private nonfinancial corporations.”

⁴² More specifically, total deposits are allocated proportionally to each item by using the ratio of transferable deposits to time and savings deposits of depository corporations, where it is assumed that this sector does not hold foreign currency deposits.

⁴³ More specifically, financial assets and liabilities in this sector are as follows:

Asset side: Currency and deposits, loans by private financial institutions, installment credits, securities other than shares, shares and other equities, financial derivatives, deposits money, accounts receivable/payable

Liability side: loans by private financial institutions, loans by the nonfinancial sector, industrial securities, shares and other equities, financial derivatives, deposits money, accounts receivable/payable.

Since the data for all companies are revised once in a year, in compiling figures for each quarter, the amount outstanding of institutions other than major companies are assumed to remain constant. Transaction flow records only those of major companies, but retroactively revised once the annual data is obtained.

(2) The Resolution and Collection Corporation

“The Resolution and Collection Corporation” is based on the financial statement of the corporation. Part of assets and liabilities of this corporation is posted under “Financial institutions for small businesses,” assuming that is received from the former Resolution and Collection Bank as a result of transfers of business from the failed Credit Cooperatives. The remaining is posted under “Finance companies”⁴⁴.

Preferred stocks gained by the Resolution and Collection Corporation through injection of public money, are deducted from stock on the financial statements and are posted under “Other equities” at face value.

(3) Securities finance companies

“Securities finance companies” is calculated by building up the items in each financial statement.

(4) Industrial Revitalization Corporation of Japan (disbanded in March 2007)

Each item of Industrial Revitalization Corporation of Japan is compiled by using financial statements.

(5) Venture capitals

Figures for venture capitals are based on “Survey on Trends in Venture Capital Investment (available in Japanese only)” by the Venture Enterprise Center and financial statements of major venture capitals. More specifically, investments from venture capitals and related funds to venture companies are recorded as shares and other equities (assets side), while investments from investors (financial institutions, nonfinancial corporations, and households)

⁴⁴ Details are as follows.

	Assets	Liabilities
Listed under finance companies	Currency, deposits, call loans and money, loans by private financial institutions, structures-financing instruments, local government securities, public corporation securities, bank debentures, industrial securities, investment trust beneficiary certificates, trust beneficiary rights, shares and other equities, deposits money, outward investment in securities, accounts receivable, others	Call loans and money, loans by private financial institutions, deposits money, accounts payable, others
Listed under finance companies and financial institutions for small businesses by allocating the items proportionally	Central government securities	Shares and other equities
Listed under financial institutions for small businesses	Deposits with the Bank of Japan	Deposits, Bank of Japan loans

to venture capitals and related funds are recorded as other equities (liabilities side).

Outline of estimation methods of individual items in this sector

Source data	Assets items	Liabilities items
Of those, extracted from the source data		
Financial statements	Currency, call loans and money, loans by private financial institutions, installment credit, repurchase agreements and securities lending, local government securities, public corporation securities, financial derivatives, deposits money, accounts receivable, outward investment in securities, others	Call loans and money, loans by private financial institutions, loans by the nonfinancial sector, repurchase agreements and securities lending, industrial securities, mortgages securities, deposits money, accounts payable, others
The data used in compiling each transaction item	Treasury discount bills	Installment credit, external securities issued by residents, CP, shares and other equities, financial derivatives
Of those, estimated		
Financial statements: Of which, proportional allocation is employed	[Transferable deposits, time, savings deposits and certificates of deposits] [Central government securities and FILP bonds, bank debentures, industrial securities, investment trust beneficiary certificates, trust beneficiary rights, structured-financing instruments, shares and other equities]	

Notes:

For the items in square brackets, the total is available from financial statements.

“Loans by private financial institutions,” “Central government securities and FILP bonds,” “Local government securities,” “Public corporation securities,” “Bank debentures,” “Industrial securities,” “Investment trust beneficiary certificates,” and “Shares” are evaluated at a market price (real value basis).

Details on major transaction items in this category:

● Loans by private financial institutions (assets side)

The total and breakdowns of housing loans, consumer credits, and loans to companies are based on the financial statement of money lending companies, the Resolution and Collection Corporation, and securities finance companies.

Loans to companies and governments by money lending companies (on a real value) are calculated residually after deducting the allowances for individual uncollectibles. Transaction flow in this category refers to the change in amount outstanding (on a book value) before deducting the allowance for individual uncollectibles⁴⁵. The difference between the term-on-term difference in the outstanding and the transaction flow (this is relevant to the amount of direct write-off and write downs) is posted in the Reconciliation Table. Only money lending companies are evaluated on a real value where their allowances for individual uncollectibles are based on the financial statement.

⁴⁵ Due to the limitations of source data, depreciation of book value of the loans, caused by direct write-offs (including draw-downs on the allowances), is included in the transaction flow.

- Repurchase agreements and securities lending transactions (assets side)

The amount outstanding of repurchase agreements of securities finance companies is based on the financial statements. The amount outstanding of "Securities lending transactions with cash collateral" is based on research on securities lending transactions.

- Central government securities and FILP bonds, bank debentures, industrial securities, investment trust beneficiary certificates, trust beneficiary rights, structured-financing instruments, shares and other equities (assets side)

The total for each item is based on the financial statement of money lending companies, the Resolution and Collection Corporation, and securities finance companies. Money lending companies, of which the financial statements are available, are recorded in this category. Of these, certain money lending companies are estimated by using the ratio of each item to the holding amount of securities. It is assumed that securities finance companies hold only central government securities and FILP bonds.

Figures for central government securities and FILP bonds, bank debentures, industrial securities, shares and other equities are converted to a market value basis from a book value basis.

- Shares and other equities (liabilities side)

The total amount of outstanding shares is evaluated at a market price based on the individual company data on number of shares and stock price.⁴⁶ Individual companies are in the sector "Other Financing Business" listed on the stock exchange. Transaction flows are calculated by taking the sum of amounts of equity raising by issuing new stocks, and exercised amounts of bonds with right to reserve new stock, based on data on fund raising in the stock market.

- Financial derivatives (assets/liabilities side)

The amount outstanding of financial derivatives in this category is based on the financial statement of money lending companies.

1-4-2-2. Structured-financing special purpose companies (SPCs) and trusts (last update: August 2014)

"Structured-financing special purpose companies (SPCs) and trusts" records structured-financing instruments under the liabilities item, based on the market data on those instruments⁴⁷. Assets held by this sector are estimated for each structured-financing

⁴⁶ Up until 2004, "Other Financing Business"—in the "Market Value by Types of Industry" that shows data of the total amounts of shares and equities evaluated at market value in the Stock Exchange and OTC-registered stock market—was assumed to be the same as "finance companies" in the FFA. However, because the source data are no longer disseminated, the compilation method has been changed by estimating the figures based on each company's source data.

⁴⁷ More specifically, asset-backed (AB) domestic corporate bonds (public offering) and AB *samurai* bonds are based on data of the issued bond outstanding published by the Japan Securities Dealers Association (*Issuing, Redemption and Outstanding Amounts of Bonds*), while monetary claim trust beneficiary rights are based on the entrusted assets outstanding of financial institutions and trust companies' financial data on entrusted assets. The ABCP is based on the *Outstanding Amounts of CP by Issuer's Category* released by the Japan Securities Depository Center (JASDEC), and AB domestic corporate bonds (private offering) are calculated by estimating the amount of those backed by monetary claim from "Asset Backed Bonds (Private Offering)" in the *Issue, Redemption and Outstanding* released by the JASDEC. The amount of bonds backed by

instrument based on the data on liquidation of underlying claims by type. Underlying claims of structured-financing instruments are loans (to companies and governments), housing loans, consumer credits, installment credits, structured-financing instruments, accounts receivable including trade credits and foreign trade credits, and deposits money.

Due to the limitations of source data, this category does not cover deposits held for the liquidity purpose.

Outline of estimation methods of individual items in this sector

Source data	Assets items	Liabilities items
Of those, estimated		
The data used in compiling each transaction item		Structured-financing instruments
Financial statements: Of which, proportional allocation is employed	[Loans by private financial institutions, installment credit, structured-financing instruments, deposits money, trade credits and foreign trade credits]	

Notes:

For the items in square brackets, the total is available from financial statements.

Details on major transaction items in this category:

- Structured-financing instruments (assets side)

The amount of monetary claim trust beneficiary certificates issued through multiple-stage securitization is posted in this category. The amount is estimated based on the entrusted assets outstanding of financial institutions' and trust companies' financial data on entrusted assets as well as the underlying claims in *Securitization Market Trends Survey Report* released by the Japan Securities Dealers Association.

1-4-3. Public financial institutions (last update: August 2006)

“Public financial institutions” equals the sum of “Fiscal Loan Fund” and “Government financial institutions.”

1-4-3-1. Fiscal Loan Fund (last update: July 2010)

Each transaction item in “Fiscal Loan Fund” is based on the financial statement breakdown data on the funds of the Fiscal Loan Fund, and the data on fiscal investment and loan program (*the Monthly Report of Fiscal Loan Fund*, and *the Fiscal Investment and Loan Program Report*).

nonfinancial assets is estimated using the same source data and is recorded in industrial securities issued by private nonfinancial corporations.

Outline of estimation methods of individual items in this sector

Source data	Assets items	Liabilities items
Of those, extracted from the source data		
Financial statements	Loans by public financial institutions, local government securities, public corporation securities, bank debentures, outward investment in securities	Deposits with the Fiscal Loan Fund, treasury discount bills, central government securities and FILP bonds, accounts payable
The data used in compiling each transaction item	Repurchase agreements and securities lending, treasury discount bills, others	Others
Of those, estimated		
Financial statements:	[Central government securities and FILP bonds – treasury discount bills]	

Notes:

For the items in square brackets, the total is available from financial statements.

“Central government securities and FILP bonds,” “Local government securities,” “Public corporation securities,” and “Bank debentures” are evaluated at a market price (real value basis).

Details on major transaction items in this category:

- Treasury discount bills (assets side)

This category is based on the summary sheet of registered government bonds and clearing government bonds for each business.

- Central government securities and FILP bonds (assets side)

This category refers to central government securities and FILP bonds (including treasury discount bills) less treasury discount bills that are estimated separately. Certain adjustment is conducted in order to retrieve the state before the transaction with repurchase agreements. Figures are converted to market value basis from book value basis.

1-4-3-2. Government financial institutions (last update: August 2014)

Each transaction item in “Government financial institutions” is based on each financial statement. The transaction items that cannot be compiled by this line are alternatively compiled using the data on each item such as *the Loans to individuals (Housing funds)* and the data on fiscal investment and loan program (*the Fiscal Investment and Loan Program Report*).

Outline of estimation methods of individual items in this sector

Source data	Assets items		Liabilities items
		Consolidated items	
Of those, extracted from the source data			
Financial statements	Currency, deposits with the Bank of Japan, transferable deposits, time and savings deposits, certificates of deposit, foreign currency deposits, loans by public financial institutions, installment credits, repurchase agreements and securities, local government securities, public corporation securities, bank debentures, industrial securities, trust beneficiary rights, shares and other equities, deposits money, accounts receivable, outward investment in securities, other external claims and debts, others	Time and savings deposits, loans by public financial institutions	Loans by private financial institutions, public corporation securities, industrial securities, shares and other equities, deposits money, accounts payable, others
The data used in compiling each transaction item	Deposits with the Fiscal Loan Fund, lending transactions, treasury discount bills		Loans by public financial institutions, repurchase agreements and securities lending transactions, external securities issued by residents
Of those, estimated			
Financial statements:	[Central government securities and FILP bonds—treasury discount bills]		[Loans by the nonfinancial sector – loans by private financial institutions – loans by public financial institutions]
Others			
Consolidated data		Call loans and money, shares and other equities	

Notes:

For the items in square bracket, the total is available from financial statements.

“Central government securities and FILP bonds,” “Local government securities,” “Public corporation securities,” “Bank debentures,” “Industrial securities,” and “Shares” are evaluated at a market price (real value basis).

Details on major transaction items in this category:

- Loans by public financial institutions (assets side)

“Loans by public financial institutions” is based on the financial statement of each institution. Of these, housing loans by Japan Housing Finance Agency are based on *the Loans to individuals (Housing funds)*, while housing loans by the Okinawa Development Finance Corporation and loans by Welfare And Medical Service Agency (account for management and collection of claims converted) are estimated by the composition ratio that is used in specifying borrowing sectors.

- Repurchase agreements and securities lending transactions (assets/liabilities side)

For the assets side, the amount outstanding of repurchase agreements is based on the financial statements. The amount on the liabilities side is estimated as: the outstanding amount of the "Others" sector in the *Balance of Bond Transactions with Repurchase Agreements (by investor type)* released by the Japan Securities Dealers Association is allocated proportionally to each constituent sector—which includes the government financial institutions sector—according to the amount of government securities held.

- Treasury discount bills (assets side)

This category is based on the summary sheet of registered government bonds and clearing government bonds of each business.

- Central government securities and FILP bonds (assets side)

This category refers to central government securities and FILP bonds in the financial statement (including treasury discount bills) less treasury discount bills that are estimated separately. Figures are converted from book value basis to market value basis.

- Loans by private financial institutions, loans by public financial institutions, and loans by the nonfinancial sector (liabilities side)

The total of these transaction items, and “Loans by private financial institutions” are based on the financial statement, while “Loans by public financial institutions,” such as the loans by the Fiscal Loan Fund, postal life insurance, and Industrial Investment Special Account, is based on the financial statement of each account and the data on fiscal investment and loan program (*the Fiscal Investment and Loan Program Report*). The residual in this category is regarded as “Loans by the nonfinancial sector.”

1-4-4. Financial dealers and brokers (last update: August 2006)

“Financial dealers and brokers” equals the sum of “Securities companies,” “*Tanshi* companies (money market dealers)” and Banks Shareholdings Purchase Corporation (special account).

1-4-4-1. Securities companies (last update: February 2011)

Each transaction item in “Securities companies” is based on the breakdown data of financial statements. The transaction items that cannot be compiled by this line are alternatively compiled by using *the Amounts Outstanding of Deposits by Depositor*, the market data on industrial bonds (stock exchange market data), and the financial statement of the Bank of Japan.

Financial holding companies, whose major subsidiaries are securities companies, are included in this sector based on the financial statement of each holding company.

Outline of estimation methods of individual items in this sector

Source data	Assets items	Liabilities items
Of those, extracted from the source data		
Financial statements	Certificates of deposit, call loans and money, loans by private financial institutions, repurchase agreements and securities lending transactions, local government securities, industrial securities, investment trust beneficiary certificates, financial derivatives, deposits money, accounts receivable, others	Bank of Japan loans, call loans and money, loans by private financial institutions, repurchase agreements and securities lending, financial derivatives, deposits money, accounts payable, others
The data used in compiling each transaction item	Deposits with the Bank of Japan	Industrial securities, external securities issued by residents, shares and other equities
Of those, estimated		
Financial statements: Of which, proportional allocation is employed	[Transferable deposits, time and savings deposits, foreign currency deposits] [Public corporation securities, bank debentures] [Central government securities and FILP bonds, CP, shares and other equities, outward investment in securities]	
Financial statements:	[Central government securities and FILP bonds – treasury discount bills]	
The data used in compiling each transaction item	Bills purchased, treasury discount bills	Bills sold

Notes:

For the items in square brackets, the total is available from financial statements.

“Central government securities and FILP bonds,” “Local government securities,” “Public corporation securities,” “Bank debentures,” “Industrial securities,” “Investment trust beneficiary certificates,” and “Shares and other equities” are evaluated at a market price (real value basis).

Details on major transaction items in this category:

- Deposits with the Bank of Japan (assets side)

“Deposits with the Bank of Japan” refers to the special current deposits recorded in the financial statement of the Bank of Japan, assuming all of these are made by securities companies.

- Transferable deposits, time and savings deposits, and certificates of deposit (assets side)

The sum of these items is based on the financial statement. The amounts are allocated proportionally to each instrument by using the composition ratio of corporation deposits in domestically licensed banks, estimated from the statistics on deposits (*the Amounts Outstanding of Deposits by Depositor*).

- Repurchase agreements and securities lending transactions (assets/liabilities side)

This category records the sum of the amount outstanding of repurchase agreements and securities lending transactions from financial statements.

- Treasury discount bills (assets side)

This category is based on the summary sheet of registered government bonds and clearing government bonds of each business. Certain adjustment is conducted in order to retrieve the state before the transaction with repurchase agreements⁴⁸.

- Central government securities and FILP bonds, shares and other equities, and outward investment in securities (assets side)

These items are calculated by using securities products in the trading account of financial statements that are allocated proportionally to shares, foreign securities, CP, and central government securities and FILP bonds. Other items that are regarded as assets in this category are also included.

Of these, “Central government securities and FILP bonds” refers to the central government securities and FILP bonds recorded in the financial statements (including treasury discount bills) less treasury discount bills that are estimated separately. Figures are converted from the book value basis to the market value basis.

- Public corporation securities and bank debentures (assets side)

The sum of these items is based on the special bonds recorded in the financial statement that are allocated proportionally to each item. Figures are converted from the book value basis to the market value basis.

- Shares and other equities (liabilities side)

The total amount of outstanding shares on market value basis is from the individual company’s data on number of shares and stock price⁴⁹. Individual companies are in the sector of “Securities” listed in the stock exchange market. Transaction flows are calculated by taking the sum of amounts of equity raising by issuing new stocks, and exercised amounts of bonds with right to reserve new stock that are based on data on fund raising in the stock market.

Equities issued by subsidiaries of financial holding companies (included in “Other equities”) are evaluated on market value by using the market price of the shares issued by the parent holding company, as its market price are regarded to be equal to those of the parent holding company.

⁴⁸ *Gensaki* transaction held by this sector is estimated by allocating the total amount outstanding of *Gensaki* transaction, based on the data on money market operation of the Bank of Japan, proportionally by using the composition ratio of treasury discount bills held by those who participate the money market operation (based on the summary sheet of registered government bonds and clearing government bonds).

⁴⁹ Before 2004, “securities” in the source data, “the Market Value by Types of Industry—which shows the data on the total amounts of shares and equities evaluated at a market value of the Stock Exchange and OTC- registered stock market—is assumed to be identical to securities. However, because the source data are no longer disseminated, the compilation method has been changed by estimating the figures based on individual company source data.

1-4-4-2. *Tanshi* companies (money market dealers) etc⁵⁰ (last update: February 2011)

Each transaction item of “*Tanshi* companies (money market dealers)” is compiled by building up the data of individual financial statements.

Outline of estimation methods of individual items in this sector

Source data	Assets items	Liabilities items
Of those, extracted from the source data		
Financial statements	Currency, deposits with the bank of Japan, transferable deposits, certificates of deposits, call loans and money, bills purchased, repurchase agreements and securities lending transactions, loans by private financial institutions, local government securities, public corporation securities, bank debentures, industrial securities, CP, investment trust beneficiary certificates, trust beneficiary rights, shares and other equities, deposits money, accounts receivable, others	Call loans and money, bills sold, Bank of Japan loans, repurchase agreements and securities lending transactions, loans by private financial institutions, shares and other equities, deposits money, accounts payable, others
Of those, estimated		
The data used in compiling each transaction item	Treasury discount bills	
Financial statements:	[Central government securities and FILP bonds – treasury discount bills]	

Notes:

“Central government securities and FILP bonds,” “Local government securities,” “Public corporation securities,” “Bank debentures,” “Industrial securities,” “Investment trust beneficiary certificates,” and “Shares” are evaluated at a market price (real value basis).

1-5. Financial auxiliaries (financial institutions other than intermediaries) (last update: August 2014)

Each transaction item in “Financial auxiliaries (financial institutions other than intermediaries)” is estimated by building up data in financial statements. Due to the limitations of source data, this sector basically employs the same values as in the previous period. Only the-end-of-fiscal-year values are available for all items of the stock exchanges, financial exchanges, foreign exchange brokers, foreign exchange margin trading firms, Agricultural and Fishery Cooperative Savings Insurance Corporation, Bank’s Shareholdings Purchase Corporation (general account) and accounts receivable/payable and deposits money in the Credit Guarantee Corporation.

⁵⁰ After 2002, this category includes the figures of special accounts by Bank’s Shareholdings Purchase Corporation other than *Tanshi* companies. The figures are based on financial statements.

Outline of estimation methods of individual items in this sector

Source data	Assets items	Liabilities items
Of those, extracted from the source data		
Financial statements etc.	Currency, transferable deposits, time and saving deposits, certificates of deposit, loans by private financial institutions, loans by public financial institutions, treasury discount bills, local government securities, public corporation securities, bank debentures, industrial securities, investment trust beneficiary certificates, trust beneficiary rights, shares and other equities, deposits money, accounts receivable, others	Bank of Japan loans, loans by private financial institutions, loans by public financial institutions, public corporation securities, shares and other equities, deposits money, accounts payable, others
The data used in compiling each transaction item	Central government securities and FILP bonds	
Of those, estimated		
Financial statements etc.	Financial derivatives	Financial derivatives

Note:

“Central government securities and FILP bonds,” “Local government securities,” “Public corporation securities,” “Bank debentures,” “Industrial securities,” “Investment trust beneficiary certificates,” and “Shares” are evaluated at a market price (real value basis).

Details on major transaction items in this category:

- Loans by private financial institutions (assets side)

“Loans by private financial institutions” is based on the financial statement of each institution. Of these, the amount outstanding of Credit Guarantee Corporation on a real value is estimated by multiplying the right of indemnity recorded in the financial statement by the ratio of account performance in collecting the rights after the subrogation.

- Financial derivatives (assets/liabilities side)

The amount outstanding of financial derivatives in this category is based on the financial statements of major foreign exchange margin trading firms, etc.

- Shares and other equities (liabilities side)

The amount of listed shares issued by the stock exchange is evaluated at market price, while the amount of equities invested in other institutions is evaluated at book value.

2. Nonfinancial corporations (last update: August 2006)

“Nonfinancial corporations” equals the sum of “Private nonfinancial corporations” and “Public nonfinancial corporations.”

2-1. Private nonfinancial corporations (last update: August 2014)

“Private nonfinancial corporations” is compiled by using the financial statement of financial institutions, the statistics on deposits (*the Amounts Outstanding of Deposits by Depositor*), the statistics on loans (*the Loans and Discounts Outstanding by Sector*), and the data on bond/stock markets. The holding amount of currency, deposits, and securities (assets side) in this sector may include the residual acquired in the compilation process for each sector (unit).

“*The Financial Statements Statistics of Corporations by Industry*,” which corresponds to the financial statement of private nonfinancial corporation, is employed solely to the transaction items such as loans by the nonfinancial sector, and trade credits and foreign trade credits, due to difficulties in obtaining source data such as (1) the detailed breakdowns of each item are not available, and (2) there are breaks in the statistics caused by the changes in samples of source data.

Outline of estimation methods of individual items in this sector

Source data	Assets items	Liabilities items
Of those, extracted from the source data		
The data used in compiling each transaction item	Loans by the nonfinancial sector, trade credits and foreign trade credits	External securities issued by residents, public corporation securities, investment trust beneficiary certificates, shares and other equities, trade credits and foreign trade credits
Of those, estimated		
The data used in compiling each transaction item	Repurchase agreements and securities lending transactions, treasury discount bills, central government securities and FILP bonds, other equities, financial derivatives, deposits money, accounts receivable, others	Industrial securities, loans by public corporations, loans by the nonfinancial sector, installment credit, repurchase agreements and securities lending, financial derivatives, deposits money, accounts payable, others
Financial statements: Of which, proportional allocation is employed to each sector	Local government securities, public corporation securities, industrial securities, mortgage securities, shares	Other external claims and debts
Of which, estimated by deducting the portion held by other sectors from the total	Currency, transferable deposits, time and savings deposits, foreign currency deposits, certificates of deposit, bank debentures, CP, investment trust beneficiary certificates, trust beneficiary rights, structured-financing instruments, mortgage securities, outward direct investment, outward investment in securities, other external claims and debts	Loans by private financial institutions, CP

Notes:

“Central government securities and FILP bonds,” “Local government securities,” “Public corporation securities,” “Bank debentures,” “Industrial securities,” “Investment trust beneficiary certificates,” “Shares and other securities,” and “Loans by private financial institutions” are evaluated at a market price (real value basis).

Details on major transaction items in this category:

- Repurchase agreements and securities lending transactions (assets/liabilities side)

The amount outstanding of repurchase agreements is based on the amount of the "Business corporations" sector in the *Balance of Bond Transactions with Repurchase Agreements (by investor type)* released by the Japan Securities Dealers Association. The residual of "Repurchase agreements"—obtained from the difference between assets and liabilities of this item for all sectors—is recorded on the assets side of the private nonfinancial corporations sector.

- Central government securities and FILP bonds (assets side)

This category is based on the summary sheet of registered government bonds and clearing government bonds of each business and the research on registered government bonds by holder⁵¹. Certain adjustment is conducted in order to retrieve the state before the transaction with repurchase agreements. Figures are converted from the book value basis to the market value basis

- Local government securities, public corporation securities, and industrial securities (assets side)

First, the residuals for these items are obtained by subtracting the amounts held by households and by other entities whose financial statements are available from the total issuance (amount outstanding).⁵² Then figures are allocated proportionally by using the ratio calculated from bond-registering institutions' data for each holding sector (ratio between entities whose data cannot be obtained from financial statements). Local government securities are allocated proportionally to three sectors: private nonfinancial corporations; local governments; and the NPISH. Industrial securities are allocated proportionally to three sectors: private nonfinancial corporations; the NPISH; and overseas. Public corporation securities are allocated proportionally to four sectors: private nonfinancial corporations; local governments, NPISH and overseas. Figures are evaluated on a market value basis.

- Mortgage securities (assets side)

"Mortgage securities" is the total of mortgage securities sales, based on the data on financial statements of mortgage companies registered with the Ministry of Finance minus the holding amounts of other sectors. Figures are allocated proportionally with households.

- Shares and other equities (assets side)

Shares are calculated as residuals after deducting the portion held by finance companies and NPISH from the total of shares and other equities, based on the data on the distribution of share holders (*the Shareownership Survey*).

⁵¹ The holding amount of taxable corporations, of which the holders are unidentifiable, are regarded as the holding amount of private nonfinancial corporations

⁵² Issue total (amount outstanding) of local government securities is based on the data on registered government bonds, the data published by Japan Securities Depository Center (*Issue, Redemption and Outstanding*) etc. Issue total (amount outstanding) of public corporation securities and industrial securities are based on the data on Japan Securities Dealers Association (*the New Issue Volume and Value of Outstanding Bonds*).

Unquoted shares are evaluated on market-equivalent value (included in “Other equities”), estimated by comparing profit, net asset and dividend of the listed companies with similar business type, where the figures are allocated proportionally with households sector by using the ratio of distribution of share holders of listed shares (*the Shareownership Survey*). The amount of equities invested in privately placed real estate funds is estimated based on market surveys on privately placed real estate funds (*the Survey of ARES Members on Real Estate Private Funds* released by the Association for Real Estate Securitization (ARES) and *the Survey on Private Real Estate Funds in Japan* released by Sumitomo Mitsui Trust Research Institute Co., Ltd).

- Financial derivatives (assets/liabilities side)

The amount outstanding of Exchange-traded derivatives is estimated by, first, calculating percentage of trading volume compared to domestically licensed banks by using the Exchange market data (*the Key Statistics for Government Bond Futures & Trading of Nikkei 225 Options by Type of Investors*, and *the Trading Volume and Open Interest of Options on Three-Month Euroyen Futures*), and then multiply the estimated ratio to the amount outstanding of Exchange derivatives held by domestically licensed banks⁵³.

The amount outstanding of OTC-traded derivatives on the assets side is based on the *Central Bank Survey of Foreign Exchange and Derivatives Market Activity* and the *Regular Derivatives Market Statistics in Japan*. First, the amount outstanding of transactions with “Customers other than financial institutions” is estimated from which the amount outstanding of transactions with finance companies is deducted.⁵⁴ The remainder is allocated proportionally to corporate pensions (pension trusts), securities investment trusts, and private nonfinancial corporations. The amount outstanding on the liabilities side of private nonfinancial corporations is obtained by subtracting the amount outstanding of other sectors from the total amount.

- Deposits money (assets/liabilities side)

“Deposits money” in this sector is the sum of each amount by origin of payment (i.e. employees’ deposits to companies,⁵⁵ deposits to golf courses,⁵⁶ building tenancy guarantees,⁵⁷ deposits for withholding tax,⁵⁸ margins of foreign exchange margin transactions,⁵⁹ electronic money, and prepaid cards⁶⁰) plus deposits of uncertain origin.

⁵³ Until 2nd quarter 2000, difference in the acquisition cost of the option premium (the outstanding that is not reflected by the fluctuation of market price) during the term was recorded as transaction flow.

⁵⁴ “Customers other than financial institutions (including domestically licensed banks and trust accounts)” corresponds to “corporate pensions” (pension trusts), “securities investment trusts,” “finance companies,” and “private nonfinancial corporations” in the FFA. It is assumed that transactions with other sectors do not exist.

⁵⁵ “Employees’ deposits with companies” refers to the residual that is total employees’ deposits with companies, based on the data on employees’ deposits, less employees’ deposits with financial institutions (based on financial statements).

⁵⁶ Liabilities side in this category is based on the total deposits recorded in the *Survey of Selected Service Industries*. Assets side is based on the same source data where the figures are allocated proportionally with households by using the composition ratio of members.

⁵⁷ The liabilities side of this sector refers to the total of building guarantees, based on the data on price of fixed assets and office buildings. The assets side is the residual after deducting the portion held by financial institutions sector and public non-financial institution sector from the total.

⁵⁸ Based on the statistics on tax and stamp revenues (*the Tax and Stamp Revenues*), deposits for withholding tax are estimated by regarding part of withholding income taxes of each quarter as tax payables of the previous quarter that are allocated proportionally with financial institution sector.

⁵⁹ The total amount of margins is calculated using data of the Financial Futures Association of Japan and Tokyo Financial Exchange. It is allocated proportionally to households and private nonfinancial corporations.

⁶⁰ The total amount outstanding of electronic money in the economy is based on “Recent Developments in Electronic Money in Japan (available in Japanese only)” released by the Bank of Japan, and that of prepaid cards is based on “The trend of the

- Accounts receivable/payable (assets/liabilities side)

“Accounts receivable/payable” is the sum of estimates of several items. They include estimates of taxes (assets and liabilities side),⁶¹ accounts payable against finance companies that are attributed to private nonfinancial corporations, unidentifiable accounts receivable/payable against the financial institutions sector that are attributed to private nonfinancial corporations (assets and liabilities side),⁶² the total of customer loyalty award credits (assets and liabilities side)⁶³, and unfunded retirement benefit obligations that are obtained from consolidated financial statements of listed companies (liabilities side). Accounts receivable against finance companies are assumed to be attributed to households and private nonfinancial corporations sectors only. Unidentifiable accounts receivable/payable against the financial institutions sector is calculated proportionally among sectors.

Figures on the assets side are the residual after deducting accounts payable of other sectors from accounts receivable of all sectors.

- Other external claims and debts (assets/liabilities side)

“Other external claims and debts” in this sector records the residual, i.e. the overseas’ liabilities less other domestic sector’s assets or the overseas’ assets less other domestic sectors’ liabilities.

- Others (assets/liabilities side)

“Others” are based on the financial statement of financial institutions where figures are allocated proportionally with households and NPISH.

- Installment credit (liabilities side)

Assuming some installment credits of public financial institutions and public nonfinancial institution (based on their financial statements) are credits to private nonfinancial institutions, this category is estimated by multiplying the holding amount of installment credits in finance companies (based on the financial statement) by the composition ratio of credits to private nonfinancial companies.

2-2. Public nonfinancial corporations (last update: October 2013)

For “Public nonfinancial corporations,” data by transaction items are compiled based on the summary data of financial statements of (1) government-affiliated corporations, independent administrative institutions, and special accounts of the central government,

prepaid instruments (available in Japanese only)” released by the Financial Services Agency. The amount held by private nonfinancial corporations is estimated by allocating the total amount to households and private nonfinancial corporations sectors proportionally based mainly on market surveys.

⁶¹ Based on the statistics on tax and stamp revenues (the *Tax and Stamp Revenues*), paid corporate taxes are posted under accounts receivable, assuming these as tax payable at the end of previous year or prepaid tax in the current year. Part of consumption taxes is posted under liability side, assuming that paid taxes in each quarter as taxes payable in the previous quarters.

⁶² The asset side employs the weight of holding amount of deposits and bank debentures of private nonfinancial corporations, while the liability side employs the weight of borrowing amount of the sector.

⁶³ The total amount of customer loyalty award credits is based on the sum of allowance for point gift certificates in the financial statements of issuing companies. The amount held by private nonfinancial corporations is estimated by allocating the total amount to households and private nonfinancial corporations sectors proportionally based mainly on market surveys.

and (2) local public corporations and local public enterprises. Besides, data by transaction item are estimated using the data on the issue outstanding of bonds and *the Annual Report on Local Governments Finance*.

- (1) Government-affiliated corporations, independent administrative institutions, and special accounts of the central government

Transaction items of “Government-affiliated corporations, independent administrative institutions, and special accounts of the central government” are compiled by building up the data recorded in the financial statements of each institution. The issue amount of bond (liabilities side) is based on the breakdown data on the issue outstanding.

- (2) Local public corporations and local public enterprises

For “Local public corporations and local public enterprises,” the holding amounts of deposits (assets side), the holding amounts of securities (assets side), other equities (liabilities side), borrowings (liabilities side), issue amounts of bonds (liabilities side of local public enterprises) are estimated by using financial statements. As for loans by nonfinancial sector (loans from local government, liabilities side), loans by private financial institutions of local public corporations (liabilities side), other equities of local public corporations (liabilities side), and amount of bonds issued by local public corporations (liabilities side), figures are estimated by using data by transaction items such as *Loans and Discounts Outstanding by Sector, Survey of the Joint Third Sector* (available in Japanese only), and the data on book-entry bonds. However, the financial statement for local public enterprises is available after two years from the reference period, the revision of data is conducted with considerable delay.

Outline of estimation methods of individual items in this sector

Source data	Assets items	Liabilities items
Of those, extracted from the source data		
Financial statements	Currency, transferable deposits, time and savings deposits, certificates of deposits, foreign currency deposits, loans by the nonfinancial sector, treasury discount bills, central government securities and FILP bonds, local government securities, public corporation securities, bank debentures, industrial securities, trust beneficiary rights, deposits money, trade credits and foreign trade credits, accounts receivable, outward investment in securities, outward direct investment, others	Loans by private financial institutions, industrial securities, commercial paper, shares and other equities, deposits money, trade credits and foreign trade credits, accounts payable, others
The data used in compiling each transaction item	Deposits with the Fiscal Loan Fund, repurchase agreements and securities lending transactions, shares and other equities	Repurchase agreements and securities lending transactions, public corporation securities, external securities issued by residents
Of those, estimated		
The data used in compiling each transaction item	Installment credits	Loans by public financial institutions, loans by the nonfinancial sector, installment credits, local government securities

Notes:

“Central government securities and FILP bonds,” “Local government securities,” “Public corporation securities,” “Bank debentures,” “Industrial securities,” and “Shares” are evaluated at a market price (real value basis).

Details on major transaction items in this category:

- Repurchase agreements and securities lending transactions (assets side)

The amount outstanding of repurchase agreements of the public nonfinancial corporations sector is estimated as: the outstanding amount of the "Others" sector in the *Balance of Bond Transactions with Repurchase Agreements (by investor type)* released by the Japan Securities Dealers Association is allocated proportionally to each constituent sector—which includes the public nonfinancial corporations sector—according to the amount of government securities held.

- Loans by private financial institutions (liabilities side)

For local public corporations, figures are estimated by using loans to local public corporations related to real estate business under “*The Loans and Discounts Outstanding by Sector (of which domestically licensed banks)*.” As for local public enterprises, estimates are based on “*The Overall Financial Report of Local Public Enterprises*.”

For other institutions, “Loans by private financial institutions” is the sum of data based on respective financial statement.

- Loans by public financial institutions (liabilities side)

For local public corporations, estimates are based on loans by government financial institutions to local public corporations, and for local public enterprise, loans by public financial institutions are estimated by using “*The Overall Financial Report of Local Public Enterprises*.” For other institutions, figure is the sum of data based on respective financial statement.

- Loans by the nonfinancial sector (liabilities side)

Loans from local governments to local public enterprises are estimated based on *the Annual Report on Local Government Finance*.

For the institutions other than local public enterprises and local public corporations, “Loans by the nonfinancial sector” is based on each source data such as the financial statements.

- Local government securities (liabilities side)

“Local government securities” issued by local public enterprises is estimated based on *the Overall Financial Report of Local Public Enterprises*.

3. General government (last update: August 2006)

“General government” equals the sum of “Central government,” “Local governments,” and “Social security funds.”

3-1. Central government (last update: August 2014)

“Central government” equals the sum of (1) central government general accounts and special accounts, and (2) some government-affiliated corporations, certificate companies, and independent administrative institutions.

(1) Central government general accounts and special accounts

The holding amount of government deposits (assets side) is based on *the Bank of Japan Accounts*, while the issue amount of central government securities and FILP bonds and treasury discount bills is based on the data on issuing and redemption of central government securities and FILP bonds (*Issues, Redemption and Outstandings of Public and Corporate Bonds, Bank of Japan statistics*) and the data on tax and stamp revenues (*the Tax and Stamp Revenues*).

(2) Some government-affiliated corporations such as special public corporations, certificate companies, and independent administrative institutions

Transaction items in “Government-affiliated corporations such as special public corporations, certificate companies, and independent administrative institutions” are compiled by building up the data in the financial statements of each institution. The issue amount of bond (liabilities side) is based on the data on the issue outstanding, while other equities (liabilities side) are based on *Government investment corporation lists*.

Outline of estimation methods of individual items in this sector

Source data	Assets items	Liabilities items
Of those, extracted from the source data		
Financial statements	Currency, transferable deposits, time and savings deposits, certificates of deposits, foreign currency deposits, loans by the nonfinancial sector, local government securities, public corporation securities, bank debentures, industrial securities, trust beneficiary rights, shares and other equities, financial derivatives, deposits money, accounts receivable	Loans by private financial institutions, loans by public financial institutions, loans by the nonfinancial sector, public corporation securities, shares and other equities, financial derivatives, deposits money
The data used in compiling each transaction item	Government deposits, deposits with the Fiscal Loan Fund, repurchase agreements and securities lending transactions, treasury discount bills, central government securities and FILP bonds, trade credits and foreign trade credits, outward investment in securities, other external claims and debts, gold and SDRs, others	Repurchase agreements and securities lending transactions, treasury discount bills, central government securities and FILP bonds, trade credits and foreign trade credits, other external claims and debts, others
Of those, estimated		
The data used in compiling each transaction item		Accounts payable

Notes:

“Central government securities and FILP bonds,” “Local government securities,” “Public corporation securities,” “Bank debentures,” “Industrial securities,” and “Outward investment un securities” are evaluated at a market price (real value basis).

Details on major transaction items in this category:

- Government deposits (assets side)

“Government deposits” is based on *the Bank of Japan Accounts*. All amounts in this category are posted under the asset of central government. Claims and debts between government accounts are posted under “Others” instead of this item.

- Loans by the nonfinancial sector (assets side)

“Loans by the nonfinancial sector” in general and special account is the borrowing from central government to public financial institutions and public corporations that are based on the financial statement of public financial institutions and public corporations. This category also covers the loans by special public corporations, etc..

- Treasury discount bills (assets side)

This category is based on the summary sheet of registered government bonds and clearing government bonds for each business.

- Financial derivatives (assets/liabilities side)

The value gains and losses of interest rate swap transactions of *Financial Statements by Ministries* are recorded in this category.

- Accounts receivable/payable (assets/liabilities side), deposits money (assets side)

Claims and debts against tax revenues of central government are based on the data on tax and stamp revenues (*the Tax and Stamp Revenues*). This category also includes the following items.

1. Withholdings for income tax in each quarter are posted under deposits money (assets) of the end of previous quarter, assuming these as tax receivables at the end of previous quarter.
2. Paid self-assessment income taxes and corporate taxes are posted under accounts receivable at the end of the previous fiscal year (end of first quarter) assuming that they are tax receivables at the end of the previous year, while they are posted under accounts payable at the end of the third and fourth quarters assuming that they are prepaid taxes in the current year.
3. Consumption taxes are posted under accounts receivable (assets), assuming some parts of paid taxes in each quarter as tax receivables in the previous quarter.

- Other external claims and debts (assets/liabilities side)

“Other external claims and debts” records other accounts receivable and other accounts payable held by public institutions (based on *the Balance of Payments Statistics* and *the International Investment Position of Japan*).

- Others (assets/liabilities side)

“Others” is based on the financial statement. This category also covers claims and debts between general/special accounts and the Treasury that is based on the balance sheet of Treasury funds. Liabilities side of this category also includes the debts against the central bank for the amount of coins in circulation.

- Loans by private financial institutions (liabilities side)

“Loans by private financial institutions” held by special public corporations, etc. is based on the financial statement, while those held by the general and special account is based on the financial statement of financial institutions and the statistics on loans (*the Deposits, Vault Cash, and Loans and Discounts Outstanding*).

- Loans by public financial institutions (liabilities side)

This category covers loans by public financial institutions of those identifiable by using the financial statement. This category also covers the residual after deducting the portion held by other sectors from the total loans by the Fiscal Loan Fund.

3-2. Local governments (last update: October 2013)

Since the financial statement is not available, “Local governments” is based on the data on each transaction. More specifically, holding amounts of deposits (assets side), borrowings (liabilities side), issue amounts of bonds (liabilities side) are based on each source data (*the Deposits, Vault Cash, and Loans and Discounts Outstanding, and the Loans and Discounts Outstanding by Sector*). On the other hand, the amounts invested and loaned by local governments (assets side) are based on *the Annual Report on Local Governments Regional Finance*. Since this statistics is available after 2 years from the reference period, the revision of data is conducted fairly slowly.

Outline of estimation methods of individual items in this sector

Source data	Assets items	Liabilities items
Of those, extracted from the source data		
Financial statements	Loans by the nonfinancial sector, shares and other equities, investment trust beneficiary certificates	
The data used in compiling each transaction item	Repurchase agreements and securities lending transactions, central government securities and FILP bonds, local government securities, bank debentures, others	Loans by public financial institutions, repurchase agreements and securities lending transactions, external securities issued by residents, shares and other equities
Of those, estimated		
Deducting the other sector from the total	Transferable deposits, time and savings deposits, foreign currency deposits, trust beneficiary rights	
The data used in compiling each transaction item	Certificates of deposit, public corporation securities, accounts receivable	Loans by private financial institutions, loans by the nonfinancial sector, local government securities, deposits money, accounts payable

Notes:

“Central government securities and FILP bonds,” “Local government securities,” “Public corporation securities,” and “Investment trust beneficiary certificates” are evaluated at a market price (real value basis).

Details on major transaction items in this category:

- Transferable deposits, time and savings deposits, foreign currency deposits (assets side)

These transaction items are public deposits that are recorded in the statistics on deposits (*the Deposits, Vault Cash, and Loans and Discounts Outstanding*) and the financial statement of depository corporations less the portion held by public corporations (based on the financial statements of public corporations) and the portion held by local public enterprises (based on *the Overall Financial Report of Local Public Enterprises*). Although the breakdowns by type of deposits are available for the most of depository corporations, unidentified type of deposits are regarded as time and savings deposits.

- Certificates of deposits (assets side)

“Certificates of deposits” is estimated residually, i.e. the issue total (amount outstanding) less identified sector. The residual is regarded as the portion held by households, local governments, and private nonfinancial corporations, and is multiplied by the holding ratio of local governments to these three sectors (based on the data on the buyers of certificates of deposit). This category also includes the issue amount of Agricultural Cooperatives⁶⁴ (based on their financial statement).

- Central government securities and FILP bonds (assets side)

This category is based on the summary sheet of registered government bonds and clearing government bonds of each business. Figures are converted to a market value basis.

- Local government securities and public corporation securities (assets side)

First, the residuals of these items are obtained by subtracting the amounts held by households and by other entities whose financial statements are available from the total issuance (amount outstanding).⁶⁵ Then, the figures are allocated proportionally by using the ratio calculated from bond-registering institutions’ data for each holding sector (ratio between entities whose data cannot be obtained from the financial statements). “Local government securities” is allocated proportionally to three sectors: private nonfinancial corporations; local governments; and the NPISH. “Public corporation securities” is allocated proportionally to four sectors: private nonfinancial corporations; local governments; the NPISH; and overseas. Figures are converted to a market value basis.

⁶⁴ The issue amounts of Agricultural Cooperatives are assumed to be held all by local governments.

⁶⁵ The total issuance (amount outstanding) of local government securities is based on data of registered government bonds and data published by the Japan Securities Depository Center (*Issue, Redemption and Outstanding*) etc. The total issuance (amount outstanding) of public corporation securities is based on data of outstanding issuance published by the Japan securities Dealers Association (*the New Issue Volume and Value of Outstanding Bonds*).

- Accounts receivable/payable (assets/liabilities side)

“Accounts receivable/payable” in this sector refers to those of unidentifiable sectors that are allocated proportionally⁶⁶.

- Loans by private financial institutions (liabilities side)

“Loans by private financial institutions” of each financial institution is based on the statistics on loans (*the Loans and Discounts Outstanding by Sector*) and the financial statement.

- Loans by public financial institutions (liabilities side)

“Loans by public financial institutions” is based on the financial statement of the loan holding institutions.

- Loans by the nonfinancial sector (liabilities side)

“Loans by the nonfinancial sector” refers to the sum of estimates of the central government (of which, the loans in the financial statement are regarded as those to local governments, viewing from the characteristics of the institution) and social security funds (loans to local governments with unidentifiable lenders).

- Local government securities (liabilities side)

“Local government securities” issued by local governments are estimated by allocating the total issuance (amount outstanding) by deducting those issued by local public enterprises (estimated by using the *Overall Financial Reports on Local Public Enterprises*), where the total issuance is based on data of registered bonds, book-entry bonds (*Book-Entry Transfer System for Corporate Bonds: Issue, Redemption and Outstanding* published by Japan Securities Depository Center), etc.

3-3. Social security funds (last update: August 2006)

“Social security funds” equals the sum of “Public pensions” and “Other social security funds.”

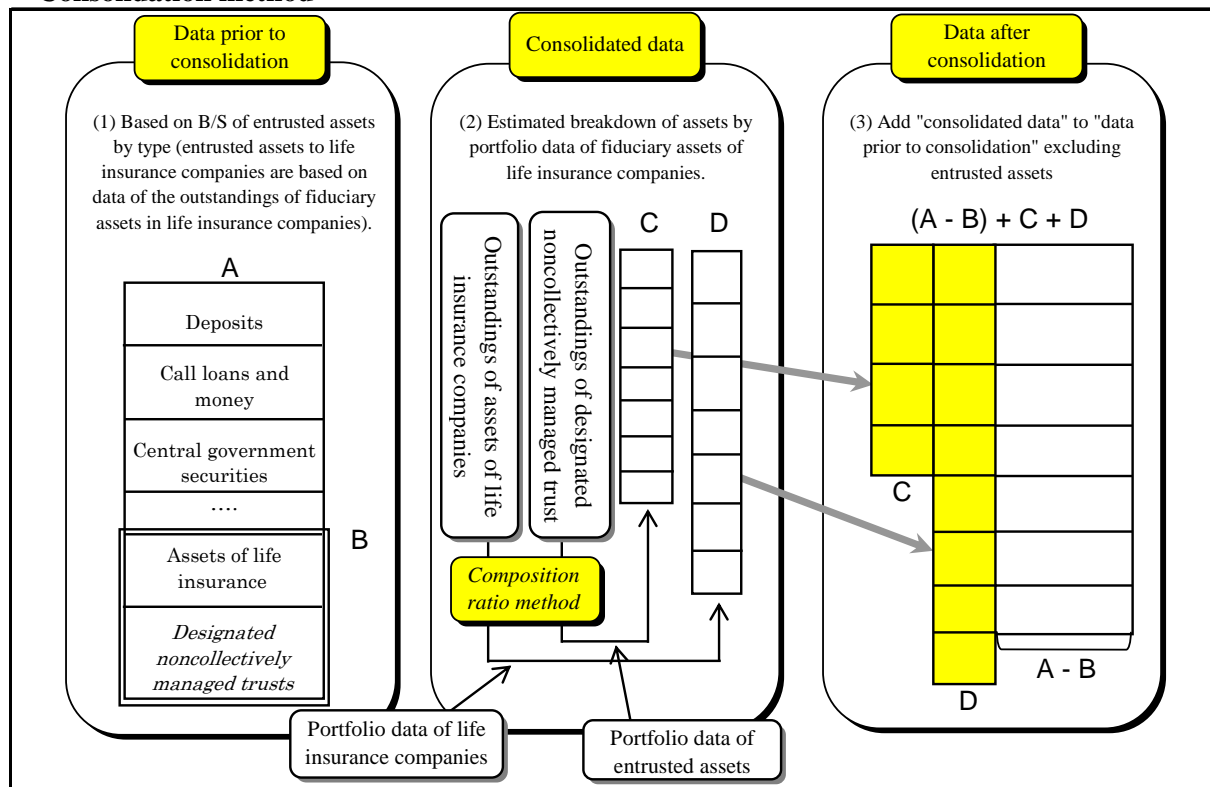
3-3-1. Public pensions (last update: October 2013)

Financial assets/liabilities (prior to consolidation) of “Public pensions” are compiled by building up the data in the financial statements of each institution such as the National Pension Special Account and mutual pensions. Funds entrusted to and managed by the Government Pension Investment Fund (until fiscal 2001, assets managed by the former Pension Welfare Service Public Corporation to secure the source of pension payments for the Employees’ Pension Insurance scheme and National Pension Scheme) are regarded as those held by public pensions.

⁶⁶ The asset side employs the weight of holding amount of deposits and bank debentures of local governments, while the liability side employs the weight of borrowing amount of that sector.

As for investment assets—of which entrusted by mutual pensions to the trust account of life insurance companies—each breakdown is consolidated into the public pensions sector. More specifically, regarding mutual pensions, the entrusted assets subject to consolidation are estimated by multiplying the composition ratio of entrusted assets of the fiduciary institutions (composition ratio method) where the composition of entrusted assets of life insurance companies and trust accounts are assumed to be the same as the asset-mix of the life insurance and noncollectively managed trust sectors (designated noncollectively managed trust). Assets entrusted to life insurance companies (including return on assets) and trust accounts are based on the pension contracts of life insurance companies and the financial statement of mutual pensions.

Consolidation method



Outline of estimation methods of individual items in this sector

Outline of estimation methods of individual items in this sector			
Source data	Assets items		Liabilities items
		Consolidated items	
Of those, extracted from the source data			
Financial statements	Currency, transferable deposits, time and savings deposits, certificates of deposit, loans by the nonfinancial sector, central government securities and FILP bonds, local government securities, public corporation securities, bank debentures, industrial securities, investment trust beneficiary certificates, trust beneficiary rights, shares and other equities, deposits money, accounts receivable, outward investment in securities, others	Currency, time and savings deposits, loans by nonfinancial sector, central government securities and FILP bonds, local government securities, public corporation securities, bank debentures, industrial securities, investment trust beneficiary certificates, trust beneficiary rights, shares and other equities, deposits money, accounts receivable, outward investment in securities, others	Loans by private financial institutions, loans by public financial institutions, deposits money, accounts payable
The data used in compiling each transaction item	Deposits with the Fiscal Loan Fund, repurchase agreements and securities lending transaction	Repurchase agreements and securities lending transaction	
Others			
Consolidated data		Call loans and money, bills purchased, treasury discount bills, external securities issued by residents, CP, structured-financing instruments	

Notes:

“Central government securities and FILP bonds,” “Local government securities,” “Public corporation securities,” “Bank debentures,” “Industrial securities,” “Investment trust beneficiary certificates,” and “Shares” are evaluated at a market price (real value basis).

Details on major transaction items in this category:

- Repurchase agreements and securities lending transactions (assets side)

The amount outstanding of repurchase agreements is based on both the *Balance of Bond Transactions with Repurchase Agreements (by Investor Type)*⁶⁷ released by the Japan Securities Dealers Association and financial statements.

- Central government securities and FILP bonds (assets side)

This category refers to central government securities and FILP bonds less treasury discount bills that are estimated separately. Certain adjustment is conducted in order to retrieve the state before the transaction with repurchase agreements. Figures are converted to market value basis from book value basis⁶⁸.

⁶⁷ The portion held by social security funds is “mutual aid associations of public institutions” of the source data.

⁶⁸ Unidentifiable type of securities (trading securities, customers’ securities, and investment securities) is assumed to be a part of central government securities and FILP bonds.

- Deposits money (assets side)

This category refers to unearned social insurance premium related to Public Pension Special Account and Labor Insurance Special Account, which is estimated under a certain postulation. Specifically, a part of insurance premium contributed in a certain quarter is regarded as unearned premium of the previous quarter. Unearned insurance premium of welfare insurance are posted under deposits money (assets side) of the public pensions, and those for labor insurance are posted under deposits money (assets side) of other social security funds.

3-3-2. Other social security funds (last update: October 2013)

Most of transaction items in “Other social security funds” are compiled by building up the data in the financial statement of each institution such as the Labor Insurance Special Account and the health insurance associations.

Outline of estimation methods of individual items in this sector

Source data	Assets items	Liabilities items
Of those, extracted from the source data		
Financial statements	Currency, transferable deposits, time and savings deposits, certificates of deposits, loans by the nonfinancial sector, central government securities and FILP bonds, local government securities, public corporation securities, bank debentures, industrial securities, external securities issued by residents, investment trust beneficiary certificates, trust beneficiary rights, shares and other equities, deposits money, accounts receivable, outward investment in securities, others	Loans by private financial institutions, loans by public financial institutions, loans by the nonfinancial sector, shares and other equities, deposits money, accounts payable
The data used in compiling each transaction item	Deposits with the Fiscal Loan Fund	

Notes:

“Central government securities and FILP bonds,” “Local government securities,” “Public corporation securities,” “Bank debentures,” “Industrial securities,” and “Investment trust beneficiary certificates” are evaluated at a market price (real value basis).

4. Households (last update: October 2013)

“Households” is based on the financial statement of financial institutions, the statistics on deposits (*the Amounts Outstanding of Deposits by Depositor*), the statistics on loans (*the Loans and Discounts Outstanding by Sector*), and the market data of bonds and stocks.

As households include sole proprietorships, trade credits and foreign trade credits and loans to companies and governments, which belong to the liability of sole proprietorships (a breakdown of loans by private financial institutions), are estimated by the data on loans to firms recorded in *the Financial Statements Statistics of Corporations by Industry* and *the*

Loans and Discounts Outstanding by Sector. The holding amounts of currency, deposits, and securities (shares, bonds, outward investment in securities, and etc.) are estimated for the whole households including sole proprietorships.

Outline of estimation methods of individual items in this sector

Source data	Assets items	Liabilities items
Of those, extracted from the source data		
The data used in compiling each transaction item	Central government securities and FILP bonds, local government securities, public corporation securities, industrial securities, shares, insurance and pension reserves	Installment credit
Of those, estimated		
The data used in compiling each transaction item	Transferable deposits, time and savings deposits, foreign currency deposits, bank debentures, investment trust beneficiary certificates, trust beneficiary rights, other equities, financial derivatives, deposits money, accounts receivable	Loans by private financial institutions, loans by public financial institutions, loans by the nonfinancial sector, financial derivatives, accounts payable
Of which, proportional allocation is employed to each sector	Currency, certificates of deposit, mortgage securities, outward investment in securities, others	Others
Of which, estimated by deducting the portion held by other sectors from the total		Trade credits and foreign trade credits

Notes:

“Central government securities and FILP bonds,” “Local government securities,” “Public corporation securities,” “Industrial securities,” “Bank debentures,” “Investment trust beneficiary certificates,” “Shares and other equities,” and “Loans by private financial institutions” are evaluated at a market price (real value basis).

Details on major transaction items in this category:

- Currency (assets side)

The amount outstanding of “Currency,” of which the holding sector is unidentifiable, is regarded as the amount held by households and private nonfinancial corporations. The amount held by each sector is estimated by using the holding ratio between the two sectors.⁶⁹

- Transferable deposits, time and savings deposits, and foreign currency deposits (assets side)

For each financial institution, personal deposits by type of deposits are based on the financial statements and the statistics on deposits (the *Amounts Outstanding of Deposits by Depositor*, and the *Deposits, Vault Cash, and Loans and Discounts Outstanding*).

⁶⁹ The holding ratio of currency between households and private nonfinancial corporations is estimated by using the amount of “transferable deposits” in *Amounts Outstanding of Deposits by Depositor*.

- Certificates of deposits (assets side)

“Certificates of deposits,” of which the holding sector is unidentifiable, is regarded as the amount held by households, local governments, and private nonfinancial corporations. The portion held by households is acquired by multiplying this amount by the holding ratio of households out of these three sectors (based on the data on the buyers of certificates of deposit).

- Central government securities and FILP bonds (assets side)

This category refers to the sum of government bond certificates and inscribed central government securities and FILP bonds, which are based on the data on issuing and redemption of central government securities and FILP bonds (*the Issues, Redemption and Outstandings of Public and Corporate Bonds*), and personal holdings, which are based on the summary sheet of registered government bonds and clearing government bonds for each business, and research on holders of clearing government bonds. Figures are evaluated on a market value basis.

- Local government securities (assets side)

Personal holdings of “Local government securities” are based on the amount outstanding of Residential Local Government Bonds published by the Japan Local Government Bond Association. Figures are evaluated on a market value basis.

- Public corporation securities, and industrial securities (assets side)

Personal holdings of these transaction items are underlying bonds estimated by deducting registered bonds⁷⁰ from the issue total (amount outstanding)⁷¹. Figures are evaluated on a market value.

- Bank debentures (assets side)

All discount bank debentures sold through over-the-counter of bond-issuing institutions and those sold through securities companies, and interest-bearing bank debentures sold to households are assumed to be held by households. Figures are evaluated on a market value.

- Investment trust beneficiary certificates (assets side)

Based on the data on total net assets published by Investment Trusts Association (*the Changes in Assets of Publicly Offered Investment Trusts of Contractual Type, etc.*), amount outstanding of each instrument is obtained. Holding amount of household is estimated for each instrument by using the ratio of holding amounts in accordance with type of instrument, and by using the data on buyers compiled (*the Principals of Publicly Offered Investment Trusts of Contractual Type* and *the Distribution of Beneficial Certificate Holders of Publicly Offered Investment Trusts of Contractual Type*).

⁷⁰ The amount of registered bonds is assumed to be proportional to that of total issuance..

⁷¹ The issue total of public corporation securities and industrial securities (amount outstanding) is based on the data published by Japan Securities Dealers Association (*the New Issue Volume and Value of Outstanding Bonds*).

- Trust beneficiary rights (assets side)

“Trust beneficiary rights” is estimated by using the ratio of holding amounts according to type of instrument where each trust principle is based on the financial data on trust assets by type.

- Mortgage securities (assets side)

“Mortgage securities” is total sales (based on the financial statements by registered mortgage securities companies) minus the holding amount of other sectors. Figures are allocated proportionally with private nonfinancial corporations.

- Shares and other equities (assets side)

Shares are calculated by using the data on the distribution of shareholders (*the Share ownership Survey, etc*). Shares under “Individuals” are all assumed to be held by households).

Unquoted shares, evaluated at market-equivalent values by comparing profit, net asset and dividend of the listed companies with similar business type, are allocated proportionally with private nonfinancial corporation sector by using the ratio calculated from the data on the distribution of shareholders (*the Shareownership Survey*).

- Financial derivatives (assets/liabilities side)

The amount outstanding of forward-type instruments is calculated by deducting the amount attributable to private nonfinancial corporations from the total amount, which is estimated using the financial statements of major foreign exchange margin trading firms, etc.

The amount outstanding of option-type instruments is estimated by, first, calculating percentage of trading volume compared to domestically licensed banks by using the Exchange market data (*the Key Statistics for Government Bond Futures & Trading of Nikkei 225 Options by Type of Investors, and the Trading Volume and Open Interest of Options on Three-Month Euroyen Futures*), and then multiply the estimated ratio to the amount outstanding of Exchange-traded derivatives held by domestically licensed banks⁷².

- Insurance and pension reserves (assets side)

In “Insurance and pension reserves,” estimated amount of investment assets are recorded. They are estimated based on the financial statements of the insurance and pension funds sectors and the data on the investment contract of corporate pensions. Retirement benefit obligations are also recorded based on consolidated financial statements of listed companies.

- Deposits money (assets/liabilities side)

“Deposits money” in this sector is the sum of each figure in accordance with the origin of payments (i.e. employees’ deposits with companies⁷³, deposits with golf courses⁷⁴, margins

⁷² Until the second quarter of 2000, difference in the acquisition cost of the option premium (the amount outstanding that is not reflected by the fluctuation of market price) during the term was recorded as transaction flow.

⁷³ The total of “employees’ deposits with companies” in household sector is posted under asset side, basing on the data on employees’ deposits.

⁷⁴ This category is the total deposits (based on the *Survey of Selected Service Industries*) that are allocated proportionally

of foreign exchange margin transaction⁷⁵, electronic money, and prepaid cards⁷⁶).

- Accounts receivable/payable (assets/liabilities side)

“Accounts receivable/payable” is the sum of (1) amounts that are estimated in accordance with the origin of payments (taxes⁷⁷, insurances⁷⁸, and customer loyalty award credits⁷⁹), (2) accounts receivable of finance companies (assets side) that are allocated with private nonfinancial corporations, (3) unidentified accounts receivable/payable of financial institution sector that are allocated to each sector⁸⁰.

- Outward investment in securities (assets side)

“Outward investment in securities” is the total of all sectors, which is based on *the Balance of Payments Statistics* and *the International Investment Position of Japan*, less the holding amounts of other entities that are allocated with private nonfinancial corporations.

- Others (assets/liabilities side)

“Others” is based on the financial statements of financial sector and public nonfinancial corporations. The amounts with unidentifiable sector are allocated with private nonfinancial corporations and NPISH.

- Loans by private financial institutions (liabilities side)

Housing loans and consumer credits are based on *Loans to individuals (housing funds, funds for purchase of consumer goods and services)* from *the Loans and Discounts Outstanding by Sector* and other data sources, including the financial statements of nonbanks. Loans to sole proprietorships, on the other hand, are estimated by using *the Loans and Discounts Outstanding by Sector* and the financial statements of each financial institution etc.

- Loans by public financial institutions (liabilities side)

Loans extended to households by the Japan Housing Finance Agency are based on the Agency's financial statements, while loans by other institutions are estimated using information on the composition of borrowers at those institutions. The real value of loans is not estimated in this category, while the transaction item "Loans by private financial institutions" records real value estimated by using the allowances for individual

with private nonfinancial corporations by using the composition ratio of members.

⁷⁵ The total margins of foreign exchange margin transactions are calculated using data of the Financial Futures Association of Japan and Tokyo Financial Exchange. They are allocated to households and private nonfinancial corporations proportionally.

⁷⁶ The total amount outstanding of electronic money in the economy is based on “Recent Developments in Electronic Money in Japan (available in Japanese only)” released by the Bank of Japan, and that of prepaid cards is based on “The trend of the prepaid instruments (available in Japanese only)” released by the Financial Services Agency. The amount held by households is estimated by allocating the total amount to households and private nonfinancial corporations sectors proportionally based mainly on market surveys.

⁷⁷ Based on the statistics on tax and stamp revenues (*the Tax and Stamp Revenues*), paid income taxes are posted under accounts receivable, regarding these as tax payable at the end of previous term or prepaid tax in the current term.

⁷⁸ Based on the financial statements of insurance companies.

⁷⁹ The total amount of customer loyalty award credits is based on the sum of allowance for point gift certificates in the financial statements of issuing companies. The amount held by households is estimated by allocating the total amount to households and private nonfinancial corporations sectors proportionally based on market surveys.

⁸⁰ The asset side employs the weight of holding amount of deposits and bank debentures in households, while the liability side employs the weight of borrowing amount in that sector.

uncollectibles. In calculating transaction flows, adjustments are made to separate direct write-offs from the flow.⁸¹

- Loans by the nonfinancial sector (liabilities side)

“Loans by the nonfinancial sector” refers to the sum of the estimates of loans by the central government (loans by public institutions to households, based on financial statements), local governments (loans to households compiled in accordance with the characteristic of its activity based on *the Annual Report on Local Governments Finance*), and social security funds (loans based on financial statements plus trust assets), and private nonprofit institutions serving households.

- Installment credit (liabilities side)

“Installment credit” is the installment credit of the Urban Renaissance Agency published by the Japan Housing Finance Agency.

- Trade credits and foreign trade credits (liabilities side)

“Trade credits and foreign trade credits” is the residual after deducting the total of assets from the total of liabilities of each sector (calculated by using *the Financial Statements Statistics of Corporation by Industry* and *the Balance of Payments Statistics*) that are assumed to be trade receivables/payables of sole proprietorships.

5. Private Nonprofit Institutions Serving Households (NPISH) (last update: October 2013)

“Private Nonprofit Institutions Serving Households (NPISH)” is estimated based on the financial statement of financial institutions, the statistics on deposits (*the Amounts Outstanding of Deposits by Depositor*), the statistics on loans (*the Loans and Discounts Outstanding by Sector*), the market data of bonds and stocks, *the survey on private nonprofit institutions* released by the Cabinet Office (available in Japanese only), and *the financial data of private schools* released by the Promotion and Mutual Aid Corporation for Private Schools of Japan (available in Japanese only). Identification of NPISH is made by the content of each business such as medical, educational, and welfare services, and by the legal standing of non-taxable corporations.

⁸¹ For the compilation method of loans, see "C. Loans" in Chapter 3.

Outline of estimation methods of individual items in this sector

Source data	Assets items	Liabilities items
Of those, estimated		
The data used in compiling each transaction item	Transferable deposits, time and savings deposits, foreign currency deposits, loans by the nonfinancial sector, repurchase agreements and securities lending transactions, central government securities and FILP bonds, bank debentures, investment trust beneficiary certificates, shares and other equities	Loans by private financial institutions, loans by public financial institutions, loans by the nonfinancial sector, repurchase agreements and securities lending transactions, shares and other equities, deposits money
Of which, proportional allocation is employed to each sector	Currency, certificates of deposit, local government securities, public corporation securities, industrial securities, accounts receivable, others	Accounts payable, others

Notes:

“Central government securities and FILP bonds,” “Local government securities,” “Public corporation securities,” “Industrial securities,” “Bank debentures,” “Investment trust beneficiary certificates,” “Shares and other equities,” and “Loans by private financial institutions” are evaluated at a market price (real value basis).

Details on major transaction items in this category:

- Currency (assets side)

“Currency,” of which the holding sector is unidentifiable, is regarded as the amount held by households, the NPISH, and private nonfinancial corporations. The portion held by the NPISH is calculated by multiplying the unidentifiable amount by the holding ratio of the NPISH within the three sectors (the holding ratio of “Transferable deposits” is applied).

- Transferable deposits, time and savings deposits, and foreign currency deposits (assets side)

Deposits of each type for each financial institution are based on the financial statement and *the Amounts Outstanding of Deposits by Depositor* (assuming “Medical and other health services, Social insurance and welfare, Educational services and other organizations” in this statistics as the portion held by NPISH).

- Certificates of deposit (assets side)

“Certificates of deposit,” of which the holding sector is unidentifiable, is regarded as the amount held by households, the NPISH, and private nonfinancial corporations. The portion held by the NPISH is calculated by multiplying the identifiable amount by the holding ratio of the NPISH within the three sectors (the holding ratio of deposits other than “Certificates of deposit” is applied).

- Central government securities and FILP bonds (assets side)

This category refers to central government securities and FILP bonds that are based on the data for NPISH (*the survey on private nonprofit institutions* and *the financial data of private schools*), the summary sheet of registered government bonds and clearing government bonds of each business, and the data on the holders of clearing government bonds. Figures are

evaluated on a market value.

- Local government securities, public corporation securities, and industrial securities (assets side)

The figures for these items are obtained by first calculating the residual, which is obtained by subtracting the amounts held by households and by other entities whose financial statements are available from the issue total (amount outstanding)⁸². Then, the figures are allocated proportionally by using the ratio calculated from bond-registering institutions' data for each holding sector (ratio between entities whose data cannot be obtained from the financial statements). Local government securities are allocated proportionally with private nonfinancial corporations and local governments. Public corporation securities are allocated proportionally with local governments, private nonfinancial corporations, and overseas. Industrial securities are allocated proportionally with private nonfinancial corporations and overseas. Figures are evaluated on a market value.

- Bank debentures (assets side)

The holding amount of NPISH is estimated by multiplying total discount bank debentures, which is based on the data on securities issuing published by Japan Securities Dealers Association (*the New Issue Volume and Value of Outstanding Bonds*), by a certain ratio.

- Investment trust beneficiary certificates (assets side)

"Investment trust beneficiary certificates" is based on the data on total net assets published by Investment Trusts Association (*the Changes in Assets of Publicly Offered Investment Trusts of Contractual Type*) with using the composition ratio of each instrument that is calculated by considering the characteristics of instruments and by the data on buyers compiled by Investment Trusts Association (*the Principals of Publicly Offered Investment Trusts of Contractual Type and the Distribution of Beneficial Certificate Holders of Publicly Offered Investment Trusts of Contractual Type*).

- Shares and other equities (assets/liabilities side)

"Shares and other equities" is estimated by the data for NPISH (*the survey on private nonprofit institutions and the financial data of private schools*). Figures are evaluated on a market value.

- Accounts receivable/payable (assets/liabilities side)

"Accounts receivable/payable" in this sector is unidentifiable accounts receivable/payable in financial institution sector that are allocated to each sector⁸³.

- Others (assets/liabilities side)

"Others" is based on the financial statements of financial sector and public nonfinancial

⁸² The total issuance of local government securities (amount outstanding) is estimated by using data of registered government bonds, data published by the Japan Securities Depository Center (*Issue, Redemption and Outstanding*) etc. The total issuance of public corporation securities and industrial securities (amount outstanding) is based on data of securities issued published by the Japan Securities Dealers Association (*the New Issue Volume and Value of Outstanding Bonds*).

⁸³ The asset side employs the weight of holding amount of deposits and bank debentures in NPISH, while the liability side employs the weight of borrowing amount in that sector.

corporations. The amounts with unidentifiable sector are allocated with private nonfinancial corporations and households.

- Loans by private financial institutions (liabilities side)

“Loans by private financial institutions” for each financial institution are based on the data such as *the Loans and Discounts Outstanding by Sector* (assuming the total of loans to “Medical, Health Care and Welfare minus Medical and Public Health Securities,” “Education, Learning Support,” “Other Organizations”⁸⁴ and part of loans to “Medical and other health services” in this statistics as the portion held by NPISH).

- Loans by public financial institutions (liabilities side)

“Loans by public financial institutions” to NPISH is estimated by using the composition ratio of borrowers that is calculated in accordance with the characteristic of the activity of public financial institutions.

- Loans by the nonfinancial sector (liabilities side)

“Loans by the nonfinancial sector” refers to the sum of the estimates of loans by central government (loans by public institutions to NPISH in accordance with their activities that are based on the financial statement), local governments (based on *the Annual Report on Local Governments Finance*) and social security funds (loans that are calculated by using the financial statements plus entrusted assets).

6. Overseas (last update: August 2014)

“Overseas” is based on the *Balance of Payments Statistics, the International Investment Position of Japan*, and *the Gross External Debt Position of Japan*. Part of the transaction items is estimated by using the data on assets of financial institutions (in domestic sector).

More specifically, treasury discount bills, central government securities and FILP bonds, loans by the nonfinancial sector (assets side), shares and other equities (assets side), trade credits and foreign trade credits (assets/liabilities side), outward direct investment, and other external claims and debts (assets side) are based on the *Balance of Payments Statistics, the International Investment Position of Japan*, and *the Gross External Debt Position of Japan*.

On the other hand, the transaction amounts of deposits (assets/liabilities side) and loans (liabilities side) are estimated by using the financial data on transactions of domestically licensed banks with overseas and the data on deposits and loans (the *Amounts Outstanding of Deposits by Depositor* and the *Loans and Discounts Outstanding by Sector*).

The net positions such as “Financial surplus and deficit” (flow) and “Difference between financial assets and liabilities” (stock) intactly place “Current account balance” and “Capital account” in *the Balance of Payments Statistics* (in case of flow), and “Total net

⁸⁴ Since March 2003, the industries used in the estimation have been changed, since the classification of industries in *Loans and Discounts Outstanding by Sector* was revised.

assets” in the *International Investment Position of Japan*⁸⁵ (in case of stock)⁸⁶. Resulting discrepancies are reconciled in the liabilities side of “Other external claims and debts.”

For the amount outstanding, the figures are based on the *International Investment Position of Japan (End of Year, End of Quarter)* and the *Gross External Debt Position of Japan*. The fluctuations of stocks caused by exchange fluctuation are posted in the Reconciliation Table where it also includes another factors such as the divergences between flow and stock in the source data.

Outline of estimation methods of individual items in this sector

Source data	Assets items	Liabilities items
Of those, extracted from the source data		
<i>Balance of Payments Statistics and International Investment Position of Japan</i>	Loans by the nonfinancial sector, treasury discount bills, shares and other equities, trade credits and foreign trade credits, other external claims and debts	Trade credits and foreign trade credits, outward direct investment, other external claims and debts
The data used in compiling each transaction item	Currency, transferable deposits, time and savings deposits, certificates of deposit, foreign currency deposits, repurchase agreements and securities lending transactions, external securities issued by residents, structured-financing instruments, shares, others	Time and savings deposits, foreign currency deposits, Bank of Japan loans, loans by private financial institutions, loans by public financial institutions, loans by the nonfinancial sector, repurchase agreements and securities lending transactions, outward investment in securities, others
Of those, estimated		
The data used in compiling each transaction item	Central government securities and FILP bonds, public corporation securities, industrial securities, bank debentures, investment trust beneficiary certificates, financial derivatives, deposits money, accounts receivable	Installment credit, financial derivatives, accounts payable

Notes:

“Treasury discount bills,” “Central government securities and FILP bonds,” “Public corporation securities,” “Industrial securities,” “Bank debentures,” “Investment trust beneficiary certificates,” “Shares and other equities,” and “Loans by private financial institutions” are evaluated at a market price (real value basis).

Details on major transaction items in this category: ⁸⁷

- Treasury discount bills (assets side)

“Treasury discount bills” is short-term money market instruments issued by the general government sector in the *Gross External Debt Position of Japan*. Figures are evaluated at

⁸⁵ Strictly speaking, total net asset less holding amount of gold and SDRs of domestic economic entities (specifically, central government and central bank) is posted.

In the FFA, gold and SDRs are treated as financial assets that does not have corresponding liabilities, but on the other hand, the *International Investment Position of Japan* include them under the external net assets, such adjustments are made in calculating difference between financial assets and liabilities of the overseas sector.

⁸⁶ The net positions of the overseas sector are calculated differently from those of other sectors. In other sectors, they are calculated as the difference of assets and liabilities.

⁸⁷ As for “Currency” (assets side), data was obtainable only from the financial statements of foreign branches of domestically licensed banks until the fourth quarter of 2003. Due to limitations of source data, however, data of yen held by nonresidents including the above foreign branches are unavailable from the first quarter of 2004.

market price.⁸⁸

- Central government securities and FILP bonds (assets side)

The amount outstanding is obtained by subtracting treasury discount bills from debt securities issued by the public sector on the liabilities side of “Portfolio investments” (*International Investment Position of Japan*). The amount outstanding of debt securities issued by public institutions other than the central government -- i.e. local governments and public corporations -- is also subtracted from the amount issued by the public sector as a whole, which includes both the central government and public institutions.

The transaction flow is estimated by subtracting treasury discount bills from “Government bonds” in *Inward Investment by Types of Debt Securities (Balance of Payments Statistics)*.

- Local government securities (assets side)

The amount outstanding of “Local government securities” held by the overseas sector is based on the actual balance recorded in the "Non-resident, etc. account" as shown in the *Issue, Redemption and Outstanding*, which is published by the Japan Securities Depository Center. Figures are evaluated on a market value basis.

- Public corporation securities (assets side)

The amount outstanding of “Public corporation securities” held by the overseas sector is estimated first by calculating the residual after deducting the amounts held by households and by other entities whose financial statements are obtainable from the issue total (amount outstanding).⁸⁹ Then, the residual is allocated proportionally to three sectors by using the ratio calculated from bond-registering institutions’ data for each holding sector (ratio between entities whose data cannot be obtained from the financial statements). The three sectors include local governments, private nonfinancial corporations, and the NPISH. The figure is evaluated on a market value basis.

The transaction flow is estimated by subtracting treasury discount bills, central government securities and FILP bonds, external securities issued by residents and local government securities from debt securities issued by the public sector on the liabilities side of “Portfolio investments” (*Balance of Payments Statistics*).

- Industrial securities (assets side)

The amount outstanding for this item is estimated by first calculating the residual after deducting the amounts held by households and by other entities whose financial statements are obtainable from the issue total (amount outstanding).⁹⁰ Then, the residual is allocated

⁸⁸ Short-term money market instruments issued by the general government sector in the *Gross External Debt Position of Japan* may include short-term money market instruments other than treasury discount bills held by the overseas sector. However, because the amount of these instruments other than treasury discount bills is considered to be trivial, they are all regarded as “treasury discount bills.” The figures of treasury discount bills are basically recorded on a book value basis, whereas for the overseas sector, in which the holding amount of treasury discount bills is published on a market value basis in the source data (*Gross External Debt Position of Japan*), the figures are evaluated at market price. The difference between the figures on a market value basis and that on a book value basis is considered to be trivial as well.

⁸⁹ The issue total is based on the data released by Japan Securities Dealers Association (*the New Issue Volume and Value of Outstanding Bonds*).

⁹⁰ The issue total is based on the data released by Japan Securities Dealers Association (*the New Issue Volume and Value of Outstanding Bonds*).

proportionally to two sectors by using the ratio calculated from bond-registering institutions' data for each holding sector (ratio between entities whose data cannot be obtained from the financial statements). The two sectors include private nonfinancial corporations and NPISH. The figure is evaluated on a market value basis.

- Shares and other equities (assets side)

The amount outstanding of "Shares and other equities" held by the overseas sector is obtained from the sum of "Equity other than reinvestment of earnings" in "Direct investment" and "Equity and investment fund shares" in "Portfolio investment" on a market-value basis based on the *International Investment Position of Japan* minus the amount of "Investment trust beneficiary certificates." The transaction flow is the sum of "Equity other than reinvestment of earnings" in "Direct investment" and "Equity and investment fund shares" in "Portfolio investment" based on the *Balance of Payments Statistics* excluding the amount of "Investment trust beneficiary certificates."

The amount outstanding of "Shares" is based on the amount held by "Foreigners" in the *Share ownership Survey* released by the TSE on a market value basis. The transaction flow is based on the sales amount of "Foreigners" in the *Trading Volume & Value by Type of Investor* released by the TSE.

- Investment trust beneficiary certificates (assets side)

This item refers to investment trust beneficiary certificates issued by the Real Estate Investment Trust Corporations (REIT). The amount outstanding is the sum of each investment trust's market price published by the Tokyo Stock Exchange, multiplied by the composition ratio held by the overseas sector released in the financial results and other material of each investment trust.

- Financial derivatives (assets/liabilities side)

The amount outstanding of OTC-traded derivatives is estimated by allocating the holding amounts of domestically licensed banks proportionally by using the ratio of transaction with overseas (based on the *Central Bank Survey of Foreign Exchange and Derivatives Market Activity* and the *Results of the Regular Derivatives Market Statistics in Japan*).

The amount outstanding of Exchange-traded derivatives is estimated by multiplying those held by domestically licensed banks by the weight of transaction volume to domestically licensed banks by using the Exchange market data (*the Key Statistics for Government Bond Futures Options & Trading of Nikkei 225 Options by Type of Investors*, and the *Trading Volume and Open Interest of Options on Three-Month Euroyen Futures*).

- Accounts receivable/payable (assets/liabilities side)

"Accounts receivable/payable" in this sector is part of other accounts receivable and payable in the external debt position of Japan from the Balance of Payments Statistics and part of the unidentifiable accounts receivable/payable of the financial institution sector that are allocated to each sector⁹¹.

⁹¹ The asset side employs the weight of holding amount of deposits and bank debentures in overseas, while the liability side employs the weight of borrowing amount in that sector.

- Other external claims and debts (assets side)

“Other external claims and debts” is identified from “Other accounts payable” on the domestic liabilities side in *the Balance of Payments Statistics* and *the International Investment Position of Japan*.

- Installment credit (liabilities side)

“Installment credit” is estimated by multiplying the holding amount of installment credits in finance companies (based on the financial statement) by the ratio of credits with overseas to total of installment credit.

- Other external claims and debts (liabilities side)

Stocks are the total of financial assets less the financial liabilities other than those recorded in “Other external claims and debts (liabilities side)” plus “Net external assets” in *the International Investment Position of Japan*. Transaction flow is estimated residually that is the total of investment assets less investment assets other than those recorded in *the International Investment Position of Japan* and financial surplus and deficit.

- Financial surplus or deficit / Difference (liabilities side)

“Difference between financial assets and liabilities” (stock) refers to the external net assets in *International Investment Position of Japan* less the amount outstanding of monetary gold held by domestic economic entities⁹² with opposite sign (i.e. post plus in FFA when the figure in IIP is minus, and minus when plus in IIP). With regard to the “Difference” other than that for end-December, “Financial surplus and deficit” of the corresponding quarter as well as reconciliation amount of shares and other assets held by overseas sector (in order to reflect changes accompanying fluctuation in market value) are added to the amount outstanding of end of previous term.

⁹² In the FFA, monetary gold is regarded as financial asset that has no corresponding liability, but since it is posted in the external net assets of International Investment Position of Japan, adjustments are made in calculating this item.

Chapter3. Estimation Methods of Transaction Items and Remarks

Chapter 3. Estimation Methods of Transaction Items and Remarks

A. Currency and deposits (last update: August 2006)

“Currency and deposits” equals the sum of the breakdowns (currency, deposits with the Bank of Japan, government deposits, transferable deposits, time and savings deposits, certificates of deposits, and foreign currency deposits).

The total amount (liabilities side) is based on the financial statements of financial institutions. While holding amounts of financial institutions is based on their financial statements, those of households and private nonfinancial corporations are based on the statistics on deposits (*Deposits by Depositors* and *Public Opinion Survey on Household Saving and Consumption*).

The amount outstanding in this category is evaluated on a face value or on a book value, while the transaction flow is, in principle, recorded using term-on-term difference in that value.

A-a. Currency (last update: October 2011)

“Currency” equals the sum of Bank of Japan notes and coins circulated in the market where the former is based on the financial statement of the Bank of Japan, while the later is based on *the Coins in Circulation*. All currencies, including Bank of Japan notes and coins, are regarded as those issued by the central bank¹.

Holding amounts of financial institutions, social security funds, public nonfinancial corporations, central government, and overseas (only those held by overseas branches of domestically licensed banks) are based on the financial statement of individual institutions. Holding amounts of households and private nonfinancial corporations are estimated by allocating residuals with the holding ratio².

The amount outstanding in this category is evaluated on a face value, while the transaction flow is recorded using term-on-term difference in that value.

Note:

This category in overseas sector was only identified by using the financial statement of foreign branches of domestically licensed banks until the fourth quarter of 2003. Due to the limitations of source data, yen held by nonresidents including the above foreign branches are not covered since the first quarter of 2004.

A-b. Deposits with the Bank of Japan (last update: August 2006)

This category refers to deposits made with the Bank of Japan by financial institutions, and the total is based on *the Bank of Japan Accounts*.

Holding amounts of individual sectors in this category (assets side) are based on the financial statements of individual financial institutions.

¹ Issuing entity of coins in circulation is the central government under Japan’s current system. Considering the interchangeability of coins and notes, the whole currency is posted under the liabilities of the central bank. In this line, the claim between the central bank and the central government is fictionalized for the portion corresponding to coins in circulation. This fictionalized portion is posted under “other assets.”

² The holding ratio of “transferable deposits” between households and private nonfinancial corporations, which is based on the *Amounts Outstanding of Deposits by Depositor*, is assumed to be equal to the holding ratio of “currency.”

The amount outstanding in this category is evaluated on a face value, while the transaction flow is recorded using term-on-term difference in that value.

A-c. Government deposits (last update: August 2006)

The total of “Government deposits” (the sum of government current deposits, government special deposits, and government foreign currency deposits) is based on *the Bank of Japan Accounts*.

The amount outstanding in this category is evaluated on a face value, while the transaction flow is recorded using term-on-term difference in that value.

A-d. e. g. Transferable deposits, time and savings deposits, and foreign currency deposits (last update: August 2006)

Deposits (transferable deposits, time and savings deposits, and foreign currency deposits) with domestic financial institutions are based on the financial statement of depository corporations and the statistics on deposits (*the Deposit by Depositors*, and *the Deposits, Vault Cash, and Loans and Discounts Outstanding*). Residents’ deposits with foreign financial institutions are based on *the Balance of Payments Statistics* and *the International Investment Position of Japan*.

The total amount by type of deposits is based mainly on financial statements. On the other hand, the specification of the type of holding entity and the type of deposits (transferable deposits, time and savings deposits, and foreign currency deposits) is made by making overall estimate for individual financial institutions that receives these deposits (i.e. domestic financial institutions and foreign financial institutions). Then, holding deposits of entities that are available from financial statements are additionally used for further estimation as shown below.

Details on Estimation Method by Type of Holding Entity and by Type of Deposit

	Estimation Method by Type of Holding Entity	Estimation Method by Type of Deposit	Postal Savings
Financial Institutions	Based on the financial statements of these institutions.	Based on the financial statements of these institutions where yen deposits of foreign deposits are regarded as time and savings deposits.	-
Private Nonfinancial Corporations	Figures are estimated residually.	Figures are estimated residually.	Figures are estimated by using the fraction of the residual.
Public Nonfinancial Corporations	Based on the financial statements of these institutions.	Based on the financial statements of these institutions.	-
Local Governments	Based on “Public deposits” recorded in the <i>Deposits, Vault Cash, and Loans and Discounts Outstanding</i> less the deposits held by public nonfinancial corporations.	Based on the classification employed in the <i>Deposits by depositor</i> .	-
Central Government	Based on <i>International reserves / foreign currency liquidity</i> .	Based on the financial statements of central government where all government deposits are regarded as time and savings deposits.	-
Social Security Funds	Based on the financial statements of these institutions.	Based on the financial statements of these institutions.	-
Households	Based on “Individual deposits” recorded in the <i>Deposits by depositor</i> .	Based on the classification employed in the <i>Deposits by depositor</i> .	Based on the data sources from Japan Post.
NPISH	Based on “Medical and other health services, social insurance and welfare, educational services and other organizations” recorded in the <i>Deposits by depositor</i> .	Based on the classification employed in the <i>Deposits by depositor</i> .	Figures are estimated by using the fraction of the residual.
Overseas	Based on “Non-resident yen deposits” recorded in the <i>Deposits by depositor</i> .	Mainly based on the classification employed in the <i>Deposits by depositor</i> .	-

● Deposits with domestic financial institutions

The estimation in accordance with the type of deposit (transferable deposits, time and savings deposits, and foreign currency deposits) and the type of depositor is based on *the Deposits by depositor*, *the Deposits, Vault Cash, and Loans and Discounts Outstanding*, and the financial statement of domestic financial institutions. For the deposits with domestically licensed banks and Shinkin Banks (Shinkin Banks are included in “Financial institutions for small businesses”), the type of deposit and the type of holding entity are specified by using *the Deposits by depositor* and the financial statements of these institutions.

For deposits with those other than domestically licensed banks and Shinkin Banks, the total of individual deposits by depositors are estimated by using the proportion of deposit outstanding in domestically licensed banks and Shinkin Banks, due to the limitations of source data.

For the deposits held by certain financial institutions such as “Financial institutions for small businesses,” “Financial institutions for agriculture, forestry, and fisheries,” “Private life insurance companies,” and “Private nonlife insurance companies,” individual totals are estimated by using the proportion of deposits in “Depository corporations” and other sectors because the financial statements of these institutions do not contain the breakdowns of deposit.

The amount outstanding in this category is evaluated on a face value, while the transaction flow is recorded using term-on-term difference in that value. However, as regards foreign currency deposits, for those outstanding available in dollar basis, term-on-term difference in the dollar basis are first calculated before exchanging to yen basis, in order to eliminate fluctuation of exchange rate from transaction flows.

Notes:

- 1) Due to the limitation of source data, deposit outstanding by type of deposit is estimated by using the proportion of the type of deposit in similar financial institutions.
- 2) The amount outstanding of foreign currency deposits fluctuates in accordance with the fluctuation of exchange rate. Although this is to be placed as a reconciliation amount, only those available in dollars are treated as reconciliation amount (for those that are not available in foreign currency basis, those fluctuation are included in transaction flows).

A-f. Certificates of deposit (last update: October 2013)

The total of “Certificates of deposits” is based on the financial statements of depository corporations.

Issuing entities in this category are individual sectors of banks (liabilities side).

For the holding entities in this category (assets side), the portion held by financial institutions, public nonfinancial corporations, and social security funds is based on the financial statements of individual institutions, while the portion held by local governments, households, and overseas are based on the data on sales of certificates of deposits. The residual with unidentified holding entity is regarded as the portion held by nonfinancial corporations.

The amount outstanding in this category is evaluated on a face value, while the transaction flow is recorded using term-on-term difference in that value.

B. Deposits with the Fiscal Loan Fund (last update: October 2013)

The total of “Deposits with the Fiscal Loan Fund” is based on the financial statement of the Fiscal Loan Fund.

For the holding entity (assets side) in this category is based on the financial statement of Fiscal Loan Fund and on financial statement of Special Accounts (see the following chart for the details).

The amount outstanding in this category is evaluated on a face value, while the transaction flow is recorded using term-on-term difference in that value.

Major Depositors in this Category

<p>a) Financial institutions for small businesses</p> <p>Postal Savings Funds</p> <p>Postal transfers Funds</p>	<p>e) Public nonfinancial corporations</p> <p>Pharmaceuticals and Medical Devices Agency</p>	<p>h) Central government</p> <p>Special Accounts for Measures for Energy</p> <p>Special Accounts for Local Allocation and Local Transfer Tax</p> <p>Special Accounts for Foreign Exchange Fund</p> <p>Special Accounts for Registration</p> <p>Special Accounts for National Property Special Consolidation Fund</p> <p>Special Accounts for Stable Supply of Food</p> <p>Special Accounts for Patent Registration</p> <p>Environmental Restoration and Conservation Agency of Japan</p> <p>National Agriculture and Food Research Organization</p> <p>New Energy and Industrial Technology Development Organization</p>
<p>b) Nonlife insurance</p> <p>Special Accounts for Earthquake Damages Reinsurance</p> <p>Special Accounts for Agricultural Mutual Aid Reinsurance</p> <p>Special Accounts for Forest Insurance</p> <p>Special Accounts for Fishing Boat Reinsurance and Fishermen's Mutual Aid</p> <p>Special Accounts for Safety of Motor Vehicle</p> <p>Special Accounts for Trade Reinsurance</p> <p>Japan Finance Corporation</p>	<p>f) Social security funds: Public pensions</p> <p>Employees' Pension Accounts of Special Accounts for Public Pension</p> <p>National Pension Accounts of Special Accounts for Public Pension</p> <p>Federation of Government Officials' Mutual Aid Associations</p> <p>Federation of Mutual Aid Associations of Local Public Service Personnel</p> <p>Public School Mutual Aid Association</p>	
<p>c) Public financial institution</p> <p>Special Accounts for Fiscal Investment and Loan Program Funds</p> <p>Welfare And Medical Service Agency</p>	<p>g) Social security funds: Others</p> <p>Health Accounts of Special Accounts for Public Pension</p> <p>Child Allowance Accounts of Special Accounts for Public Pension</p> <p>Special Accounts for Labor Insurance</p>	
<p>d) Pension funds: Others</p> <p>Organization for Workers' Retirement Allowance Mutual Aid</p> <p>Organization for Small & Medium Enterprises and Regional Innovation</p>		

C. Loans (last update: August 2006)

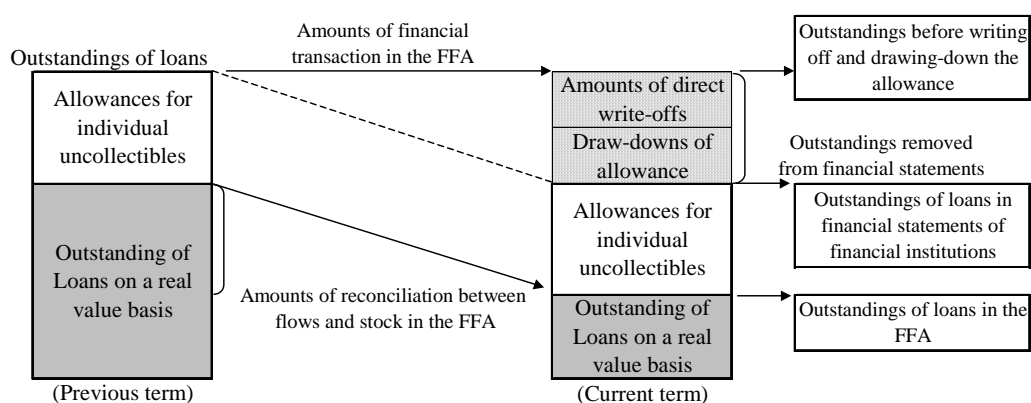
“Loans” equals the sum of the breakdowns (Bank of Japan loans, call loans and money, bills purchased and sold, loans by private financial institutions, loans by public financial institutions, loans by nonfinancial sector, installment credit, and repurchase agreements and securities lending transactions).

The breakdown data are based on the financial statements of individual institutions and the statistics on loans such as *the Loans and Discounts Outstanding by Sector*.

To the maximum extent possible, the amount outstanding in this category is evaluated on a real-value basis except for the irrecoverable portion of loans. On the other hand, the transaction flow is recorded using term-on-term difference in the amount outstanding before the write-offs in order to record only the executed amounts and the collected amounts of loans. As a result, since the divergences between the term-on-term difference in the stock data and the transaction flow data occur, these are posted in the Reconciliation Table (see the following chart).

Estimation Method of Loan Assets on Real-value Basis

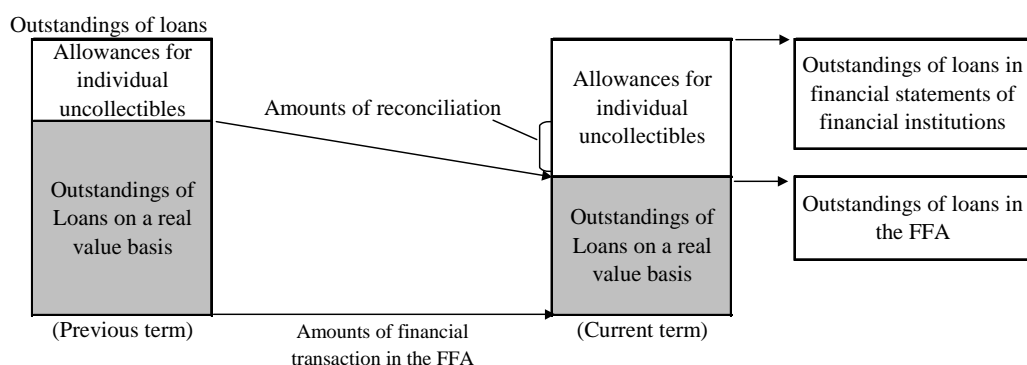
Method 1: Consideration of direct write-offs and additions/draw-downs on the allowances for individual uncollectibles, applied to “Loans by private financial institutions” of banks (domestically licensed banks, foreign banks in Japan, financial institutions for agriculture, forestry, and fisheries, and financial institutions for small businesses) and insurance (private life insurance companies and private nonlife insurance companies).



(Assumes a case where there are no transactions during the current term, and the outstanding changes only because of the fluctuations in the real value.)

Transaction flow in current term	=	Amount outstanding in the current term before direct write-offs and draw-downs on the allowances for individual uncollectibles – Amount outstanding in the previous term after direct write-offs and draw-downs on the allowances for individual uncollectibles
where		
Stock before direct write-offs and draw-downs on the allowances for individual uncollectibles in current term	=	Amount outstanding of loans in financial statements + Direct write-offs in financial statements + Amount outstanding before draw-downs on the allowances for individual uncollectibles
Amount outstanding in current term	=	Amount outstanding of loans in financial statements – Amount outstanding of draw-downs on the allowances for individual uncollectibles
Reconciliation amount	=	Direct write-offs in financial statements + Addition to the allowances for individual uncollectibles

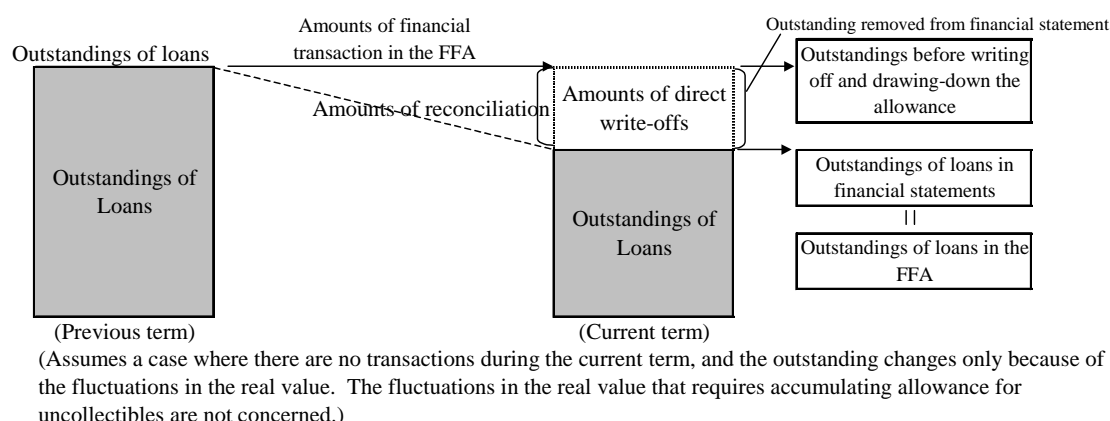
Method 2: Consideration only of the change in amount outstanding of the allowances for individual uncollectibles, applied to “Loans by private financial institutions” of finance companies.



(Assumes a case where there are no transactions during the current term, and the outstanding changes only because of the fluctuations in the real value. The fluctuations in the real value are partly contained in transaction flow.)

Transaction flow in current term	=	Amount outstanding before draw-downs on the allowances for individual uncollectibles in current term – Amount outstanding after direct write-offs and draw-downs on the allowances for individual uncollectibles in previous term
where		
Amount outstanding before direct write-offs	=	Amount outstanding of loans in financial statements + Direct write-offs in financial statements
Amount outstanding in current term	=	Amount outstanding of loans in financial statements (= Amount outstanding after direct write-offs)
Reconciliation amount	=	Increase in the allowances for individual uncollectibles

Method 3: Consideration only of direct write-offs, applied to “Loans by public financial institutions” of government financial institutions.



Transaction flow in current term	=	Amount outstanding before direct write-offs in the current term – Amount outstanding in the previous term
where		
Amount outstanding in the current term before direct write-offs	=	Amount outstanding of loans in financial statements + Direct write-offs in financial statements
Amount outstanding in current term	=	Amount outstanding of loans in financial statements (= Amount outstanding after direct write-off)
Reconciliation amount	=	Direct write-offs in financial statements

C-a. Bank of Japan loans (last update: August 2006)

The total of “Bank of Japan loans” is based on *the Bank of Japan Accounts*.

Concerning the borrowings by sector, the amounts borrowed by domestically licensed banks, foreign-owned banks in Japan, and financial institutions for small businesses, and financial dealers and brokers are estimated from *the Loans and Discounts by the Bank of Japan*.

The amount outstanding in this category is evaluated on a face value, while the transaction flow is recorded using term-on-term difference in that value.

C-b. c. Call loans and money, and bills purchased and sold (last update: February 2011)

The total of “Call loans and money, and bills purchased and sold” is based on the financial statement of financial institutions.

Both lending entity (assets side) and borrowing entity (liabilities side) are specified by using financial statements. To keep the balance between assets and liabilities, the resulting differences between assets and liabilities in “Call loans and money” and “Bills purchased and sold” are adjusted. The former is posted under the asset term of “Domestically licensed banks,” while the later is posted under “Financial dealers and brokers.”

Lending entities in this category include “Pension funds” and “Social security funds” (assets side). This is because the fiduciary property of life insurance companies and trust accounts of domestically licensed banks, which deal with pension funds, are consolidated into pension funds sector and social security funds sector.

The amount outstanding in this category is evaluated on a face value, while the transaction flow is recorded using term-on-term difference in that value.

C-d. Loans by private financial institutions

C-d-c. Loans to companies and governments (last update: October 2013)

The total of “Loans to companies and governments” is estimated by accumulating the data in financial statements of individual private financial institutions (listed below).

Amounts of individual borrowing entities (liabilities side) are based on the statistics on loans (*the Loans and Discounts Outstanding by Sector*) and the financial statement of individual financial institutions (including the data on loans by sector). See the details in the next page. In addition, since *the Loans and Discounts Outstanding by Sector* does not distinguish between sole proprietorships and corporate businesses, the loans to each sector are assumed to contain a certain portion of sole proprietorship, and this portion is recorded as loans to households.

List of Recipients of Loans by private financial institutions

	To financial institutions	To private nonfinancial corporations	To public nonfinancial corporations	To central government	To local governments	To social security funds	To households	To NPISH	To overseas
(Borrowing sectors)									
Depository corporations									
Domestically licensed banks		E					E	E	E
Foreign banks in Japan		E							
Financial institutions for agriculture, forestry, and fisheries									
(Norin Chukin Bank)		E					E	E	
(Credit Federation of Agricultural Cooperatives) (Credit Federation of Fishery Cooperatives)		E					E	E	
(Agricultural Cooperatives) (Fishery Cooperatives)									
Financial institutions for small businesses									
Shoko Chukin Bank		E					E	E	E
Shinkin banks		E					E	E	E
Shinkin Central Bank		E					E	E	
Credit Cooperatives		E					E	E	
Shinkumi Federation Bank									
Labor Banks									
The Rokinren Bank									
Resolution and Collection Corporation									
Collectively managed trusts									
Insurance and pension funds									
Private life insurance companies									
Private nonlife insurance companies									
Pension funds									
Other financial intermediaries									
Finance companies		E					E		
(Structured-financing special purpose companies and trusts)									
Securities companies									
Financial auxiliaries									

Notes:

Sectors with parenthesis indicate the sectors where loans are estimated by using the proportion.

Sectors with shaded area indicate the sectors where loan recipients are estimated.

“E” indicates the item where the decrease in the volume through direct write-off or write-downs are estimated

- Loans to financial institutions, public nonfinancial corporations, and social security funds.

Estimation is based on the financial statements of borrowing entities.

- Loans to central government and local governments.

Estimation is based on *the Loans and Discounts Outstanding by Sector*.

- Loans to households

Estimation is based on *the Loans and Discounts Outstanding by Sector* and the financial

statements of some of the financial institutions. The figure in *the Loans and Discounts Outstanding by Sector* is the sum of “Loans to individuals” (including housing funds, consumer credit and funds for tax payment etc) and loans to sole proprietorships estimated as certain amount of loans to small enterprises by “Manufacturing,” “Agriculture, forestry, fishery,” “Mining,” “Construction,” “Transport,” “Communications,” “Wholesale trade,” “Retail trade,” and “Services.”³

- Loans to NPISH

Estimation is based on *the Loans and Discounts Outstanding by Sector*. More specifically, estimation is made by adding a certain amount of loans to “Welfare in medical and public health services,” “Education, learning support,” and “Other organizations.”

- Loans to overseas

Estimation is made by adding “Loans to non-residents” in offshore accounts, “Claims to overseas branch = debit balance in inter-office account” (both are based on financial statements), and “Loans to overseas” that are recorded in *the Loans and Discounts Outstanding by Sector*.

- Loans to private nonfinancial corporations

This refers to residuals calculated by deducting the amount borrowed in all sectors other than private nonfinancial corporations from the total amount of loans.

Amount outstanding of loans by private financial institutions is calculated by subtracting the amount outstanding of allowances for individual uncollectibles (accumulated indirect write-offs) from the loans outstanding recorded in financial statements.

On the other hand, transaction flow (the posting of net loans or the difference between the executed amounts and the collected amounts of loan) is calculated by either of following methods.

(1) Method 1

Calculation by contrasting “the amount outstanding before the off-balance sheet accounting by direct write-offs and draw-downs on the allowance for individual uncollectibles (of which, the allowance for individual uncollectibles are not subtracted)” with “the previous term’s balance.”

(2) Method 2

Calculation by contrasting “the amount outstanding without deducting the allowance for individual uncollectibles” with “the previous term’s balance.”

As a result, since divergences between the term-on-term difference in the stock data and the transaction flow data occur, these are posted in the Reconciliation Table⁴.

³ Loans to businesses for individuals are estimated by using the ratio of loans to individuals in “loans to businesses” based on the *National Life Finance Corporation*, and the ratio of dwellings started for “rents” to “employees” by individuals based on the annual report of building construction etc.

⁴ Reconciliation amounts of households, NPISH, overseas, finance companies, and private nonfinancial corporations are allocated by the proportion of previous term’s outstanding of borrowing of each sector. For the volume of lending by financial institutions and governments, it is assumed that there is no decrease of the loaned assets caused by the disability of repaying and that there is no charging-off caused by non-recoverability.

Notes:

- 1) Loans to private nonfinancial corporations and sole proprietorships are estimated by allocating the figures to sectors at the estimated ratio etc. There may be some effect of statistical discrepancies on loans to them.
- 2) Real values of loan assets are complex to calculate precisely, and are estimated merely by applying prearranged definitions. Since every institution evaluates the volume of loans only on book closing days, the FFA estimates real values at the end of each quarter, except the book closing days, by considering the amount up to the previous term and the growth of amount outstanding in the previous term.

C-d-a. b. Housing loans and consumer credit (breakdown of loans by private financial institutions) (last update: August 2006)

The amount of lending entity (assets side) of housing loans and consumer credit (breakdowns of “Loans by private financial institutions”) is based on Loans to individuals (Housing funds, Funds for purchase of consumer goods and service etc.). The borrowing entity (liabilities side) in this category is households.

The amount outstanding in this category is evaluated on a face value, while the transaction flow is recorded using term-on-term difference in that value.

C-e. Loans by public financial institutions (last update: October 2013)

The total of “Loans by public financial institutions” equals the sum of Japan Post Bank, Japan Post Insurance, other nonlife insurance, other pensions, financial auxiliaries (financial institutions other than intermediaries), Fiscal Loan Fund, and public financial institutions. These loans are based on their financial statements.

Borrowing entity in individual institutions is estimated by calculating the proportion of loan recipient in accordance with the type of business (see the following chart). Purchased loans receivable of the Japan Housing Finance Agency are also included in this item.

List of Main Recipients of Loans by public financial institutions

	To private financial institutions	To public financial institutions	To private nonfinancial corporations	To public nonfinancial corporations	To central government	To local governments	To social security funds	To households	To NPISH	To overseas
Japan Post Bank										
Japan Post Insurance										
Other nonlife insurance										
Other pensions										
Financial auxiliaries (financial institutions other than intermediaries)										
Public financial institutions										
Fiscal Loan Fund										
Government financial institutions										
Special Account for Fiscal Investment and Loan Program Funds										
Japan Bank for international cooperation										
Development Bank of Japan			E							
Japan Finance Corporation for National Life			E							
Of which, former peoples' finance corporation										
Of which, former environmental Sanitation Business Finance Corporation								E		
Agriculture, Forestry and Fisheries Finance Corporation			E							
Japan Finance Corporation for Small Business			E							
Japan Housing Finance Agency								E		
Japan Finance Organization for Municipalities										
Okinawa Development Finance Corporation										
Welfare and Medical Service Agency								E		
Organization for Small & Medical Enterprises and Regional Innovation			E							
Former Japan National Oil Corporation										
Japan Railway Construction, Transport and Technology Agency										
Japan Student Services Organization										

Notes:

“E” indicates the item where write-downs by direct write-offs are estimated

“To public financial institutions” include “Loans to postal savings”

Sectors with pink area indicate the sectors consolidated into designated noncollectively invested money trusts.

Sectors with blue area indicate the sectors where loan recipients are estimated.

The amount outstanding in this category is evaluated on a face value after direct write-offs, while transaction flow is recorded using term-on-term difference in that value before the write-offs. The amount of direct write-offs is based on financial statements of individual institutions (Method 3). As a result, since the divergences between the term-on-term difference in amount outstanding and the transaction flow data occur, these are posted in the Reconciliation Table.

Notes:

- 1) Since the data in financial statement of public financial institutions do not contain sufficient information on the loan recipients, for unidentified loan recipients, a certain ratio is multiplied to loans outstanding of individual institutions in order to estimate the borrowing of individual sectors. Thus, the proportion for individual sectors may be different to the actual proportion if a certain sector suddenly changes the recipients.

- 2) The estimation for real values of “Loans by public financial institutions” by using the data on allowances for uncollectibles is complex. Therefore, decrease in the volume of loans is not estimated. Instead by grasping direct write-offs from financial statements of individual institutions, they are prevented from being included in the transaction flow. And since the amounts of direct write off in this category are acquired only by annual basis, the FFA estimates the amount of each quarter by using the amount up to the previous term and the growth of amount outstanding.

**C-e-a. Of which: housing loans (breakdown of “Loans by public financial institutions”)
(last update: February 2011)**

“Of which: housing loans” (breakdown of “Loans by public financial institutions”) is based on *Loans to individuals (Housing funds)* and the financial statements of individual sectors. Borrowing entity (liabilities side) in this category is households. Purchased loans receivable of the Japan Housing Finance Agency are also included in this item.

The amount outstanding in this category is evaluated at face value after direct write-offs, while the transaction flow is recorded using the term-on-term difference in the amount outstanding before the direct write-off. Amounts of direct write-offs are estimated from each financial statement (Method 3). As a result, since the divergences between the term-on-term difference in the stock data and the transaction flow data occur, these are posted in the Reconciliation Table.

C-f. Loans by the nonfinancial sector (last update: August 2014)

“Loans by the nonfinancial sector” is based on “The loans by private nonfinancial corporations” recorded in *the Financial Statements Statistics of Corporation by Industry*, while the loans by public institutions (central government, local governments, social security funds, public nonfinancial corporations) are estimated by building up the data in the financial statements of individual institutions. Loans by nonresidents (overseas financial institutions) are based on *the Balance of Payments Statistics* and *the International Investment Position of Japan*. For the loans by nonresidents, certain adjustments are employed in order to arrange transactions with repurchase agreements and securities lending transactions.

Concerning borrowing by sector, loans by public institutions (central government, local governments, social security funds, public nonfinancial corporations) and loans by nonresidents are estimated from the lenders’ side, while other loans are estimated from the borrowers’ side. More specifically, for loans by public institutions, the amounts are allocated proportionally to individual borrowing entities according to the type of their activities. For loans by nonresidents, estimation utilizes the data in *the Balance of Payments Statistics* and *the International Investment Position of Japan*. The borrowings from private nonfinancial corporations, on the other hand, are estimated using *the Financial Statements Statistics of Corporations by Industry*. More specifically, the residual of the total loans in *the Financial Statements Statistics of Corporations by Industry* less the loans to other sectors (identified from financial statement of loan recipients) is regarded as loans to private nonfinancial sector. Moreover, loans to nonfinancial sector from various sectors such as public nonfinancial corporations, local governments and overseas are estimated and added to the loans of private nonfinancial sector to estimate the total borrowings.

The amount outstanding in this category is evaluated on a face value, while the transaction flow is recorded using term-on-term difference in that value. Reconciliation amounts in this category result from fluctuation in amount outstanding with the changes in surveyed companies of *the*

Financial statements Statistics of Corporations by Industry and from discrepancy between *the Balance of Payments Statistics (flow)* and *the International Investment Position of Japan (stock)*, which due to fluctuation in the exchange rate.

C-g. Installment credit (last update: August 2006)

The total of “Installment credit” equals the sum of credits by nonbanks (finance companies, structured-financing special purpose companies and trusts) and public institutions (government financial institutions, public nonfinancial corporations). Figure is based on the financial statement of these institutions.

The borrowings of public financial institutions and the borrowings of nonbanks are estimated separately. More specifically, for the installment credits held by public financial institutions, the amounts are allocated proportionally to private nonfinancial corporations or households in accordance with the type of business. For the installment credits held by nonbanks, the amounts are allocated proportionally to individual borrowing entities such as financial institutions, private nonfinancial corporations, public nonfinancial corporations, and overseas that is based on the financial statement of leasing companies (breakdowns of installment credit by type of industry).

The amount outstanding in this category is evaluated on a face value, while the transaction flow is recorded using term-on-term difference in that value.

C-h. Repurchase agreements and securities lending transactions (last update: February 2011)

The total of “Repurchase agreements and securities lending transactions” is posted by summing bond *gensaki* (sale and repurchase) transaction and securities lending transactions with cash collateral.

a) Bond *gensaki* (sale and repurchase) transaction

The total of “Bond *gensaki* (sale and repurchase) transaction” is based on the financial statements of each financial institution, the data from Japan Securities Dealers Association (*the Balance of Bond Transactions with Repurchase Agreements <by investor type>*) and the data on money market operations of the Bank of Japan.

The estimation for each of buyer (lending entity; assets side) and seller (borrowing entity; liabilities side) is conducted using data from each financial statement of financial institutions other than the trust account and public financial institutions. Other sectors are estimated by matching the breakdowns of investors in the data of Japan Securities Dealers Association (*the Balance of Bond Transactions with Repurchase Agreements <by Investor type>*). The correspondence of classification between this source data and the FFA is shown in the next page.

Sectors in the FFA		Breakdowns by investor in the data of Japan Securities Dealers Association
Collectively managed trusts	⇔	“Trust banks”
Government financial institutions	⇔	Part of “Others”
Private nonfinancial corporations	⇔	Part of “Business Corporations”
Public nonfinancial corporations	⇔	Part of “Others”
Local governments	⇔	Part of “Others”
Public pensions	⇔	Part of “Others”
NPISH	⇔	“Other corporations”

The amount outstanding of the Fiscal Loan Fund is based on data on the money market operations of the Bank of Japan and data on auctions associated with *gensaki* transactions.

The amount outstanding of *gensaki* transactions on both the liabilities and assets sides by each sector is compiled as described above. In order to balance total assets and liabilities, the difference is allocated to the assets side of “Private nonfinancial corporations.”

b) Securities lending transactions with cash collateral

For "Securities lending transactions with cash collateral," the total amount is based on the financial statements of financial institutions and data from market research on related transactions. All bonds in this category are regarded as "Central government securities and FILP bonds." The holding amount of each entity is based on these financial statements and data from market research.

The amount outstanding in “Repurchase agreements and securities lending transactions” is evaluated on a face value, while the transaction flow is recorded using term-on-term difference in that value.

Note:

In principle, the amount outstanding of “Repurchase agreements and securities lending transactions” on real value basis is deemed to fluctuate in accordance with the price of bonds. Due to source data limitations, however, this type of fluctuations is not considered.

D. Securities other than shares (last update: February 2011)

“Securities other than shares” equals the sum of breakdowns (treasury discount bills, central government securities and FILP bonds, local government securities, public corporation securities, bank debentures, industrial securities, external securities issued by residents, commercial paper, investment trust beneficiary certificates, trust beneficiary rights, structured-financing instruments, and mortgage securities).

Issuing entity (liabilities side) is specified in accordance with the securities of each breakdown by using statistics on bond market.

Holding entity (assets side) is based on the financial statements of individual institutions and the data on holdings and sellings by each custodian sector (bond-registering institution).

The amount outstanding of bonds whose market prices are available are evaluated at market value, while others are evaluated on a face value or a book value basis (see following list). In some sectors, the outstanding amount of bonds at market value is publicly available and directly used, whereas in other sectors, the market value is estimated by multiplying the amount outstanding at face value by the weighted average of market prices of constituent bonds. Transaction flows of these instruments are recorded using the term-on-term difference at face value.

Evaluation methods of amount outstanding of securities other than shares.

Market value basis:	Central government securities and FILP bonds, local government securities, public corporation securities, bank debentures, industrial securities, and investment trust beneficiary certificates
Face value basis:	Treasury discount bills, external securities issued by residents, commercial paper, trust beneficiary rights, structured-financing instruments, and mortgage securities

Notes:

- 1) The amount outstanding of bonds is converted by using the weighted average of market prices of constituent bonds (central government securities and FILP bonds, local government securities, public corporation securities, bank debentures, and industrial securities). Thus, the difference in prices among bonds in the same category is not recognized in the FFA.
- 2) Conversion into market value basis is made in accordance with the category of bond (central government securities and FILP bonds, local government securities, public corporation securities, bank debentures, and industrial securities). Bonds with no market transaction, such as private placement bonds, are also converted into market value basis.

D-a. Treasury discount bills (last update: October 2013)

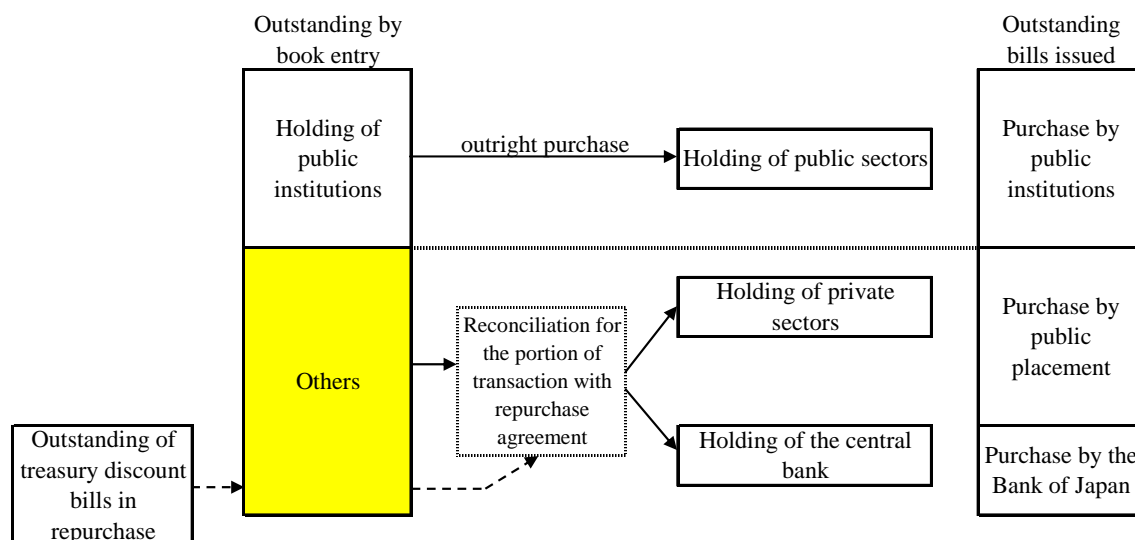
The total of “Treasury discount bills” is based on the data on the issuing and the redemption of treasury discount bills⁵.

Holding amount of each sector (assets side) is based on the summary data on the registration/book-entry of central government securities and FILP bonds, on the financial statements of financial institutions and public nonfinancial corporations, *the Gross External Debt Position of Japan*, etc. All treasury discount bills held by public nonfinancial institutions (e.g. postal savings, postal life insurance, central government, government financial institutions) are regarded as outright purchases. On the other hand, treasury discount bills held by other sectors are calculated separately by estimating treasury discount bills *gensaki*, based on the reference on

⁵ “Financing bills” was renamed as “Treasury discount bills” from the first quarter of 2009, reflecting the integration of “Financing bills” and “Treasury bills” to form “Treasury discount bills.” (The amount outstanding of Financing bills issued prior to the integration along with Treasury discount bills are recorded as “Treasury discount bills.” Meanwhile, treasury bills issued prior to the integration will continue to be recorded as “Central government securities and FILP bonds.”) All Treasury discount bills except Fiscal Loan Fund securities issued by Fiscal Loan Fund Special accounts are regarded as those issued by the central government.

the registration/book-entry of central government securities⁶, by retrieving the state before the transaction with repurchase agreements (see the following chart).

Estimation method of the holding amount of treasury discount bills



The outstanding in this category is evaluated on a face value basis, while the transaction flow is recorded using term-on-term difference in that value.

Note:

For treasury discount bills, holding amount of individual sectors are posted by retrieving the state before the transaction with repurchase agreements. Outstanding *gensaki* transactions in individual sectors are estimated proportionally using holding amounts of treasury discount bills, where *gensaki* transactions are treated as change of ownership by sector.

D-b. Central government securities and FILP bonds (last update: July 2010)

This item is the sum of ordinary government securities⁷ (interest-bearing super long-term government bonds, interest-bearing long-term government bonds, discount medium-term government bonds, interest-bearing medium-term government bonds, treasury bills), government bonds converted and FILP bonds issued by the Fiscal Loan Fund Special Account based on the reference on issuing and redemption of government securities (*the Issue, Redemption and Outstandings of Public and Corporate Bonds*)⁸.

Estimation of holding entity (assets side) is made for each type of bond. Adjustments, such as for transaction with repurchase agreements and securities lending transaction, are applied to the sectors other than households (where the adjustment treats government securities in transaction with repurchase agreements and securities lending transaction as collateral). Estimations for individual types of bonds are described as follows.

⁶ In the reference on the registration/book-entry of central government securities, it is recorded assuming that the bond ownership transfers according to the *gensaki* transaction.

⁷ Government bonds for individuals since March 2003 and inflation indexed bonds since March 2004 are included.

⁸ Deferred payment bonds are not posted under "Central government securities" in the FFA. For details, please refer to chapter 4 of "Guide to Japan's Flow of Funds Accounts" (Research and Statistics Department, Bank of Japan).

- Ordinary government securities and government bonds converted

The holding amount of ordinary government securities and government bonds converted on a face value is based on the summary sheet of registered government bonds and clearing government bonds, and the research on the holders of clearing government bonds under the book-entry system. For the breakdowns of financial institutions (excluding Fiscal Loan Fund), the book values in the financial statements are converted into face value basis. Figures for individual public nonfinancial corporations are estimated from their financial statements.

Holding amounts of overseas sector are based on *the Balance of Payments Statistics* and *the International Investment Position of Japan*. From these statistics, the holding amounts of nonresidents, which are in the name of domestic financial institutions, are posted as the holding of nonresidents. Amount outstanding at current price and transaction flows of ordinary government securities held by nonresidents are estimated directly from these source data⁹.

The holders of government bonds for the individuals and non-registered government bonds (government bonds issued in certificates) are households.

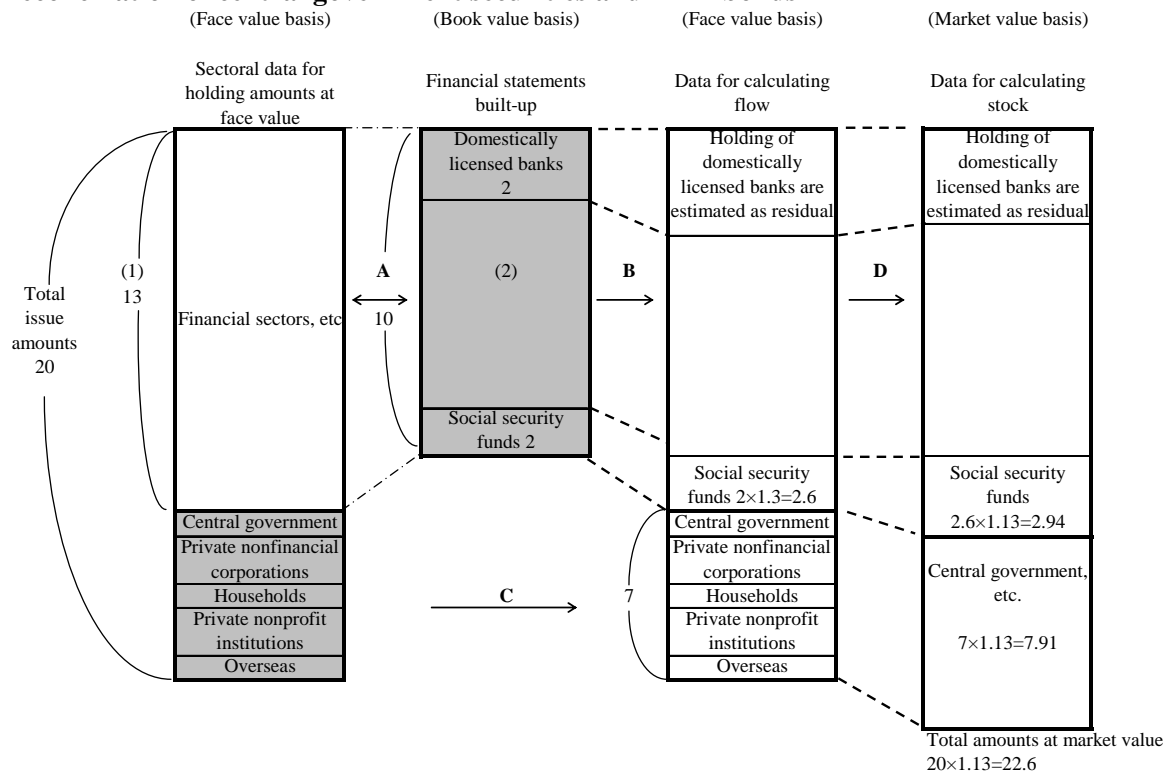
The amount outstanding is evaluated on a market value. More specifically, the amount outstanding in individual sectors on a book value (that is subject to certain reevaluations) based on individual financial statements are totaled up at the first stage of compilation. Next, by contrasting the totals with the registered government bonds and clearing government bonds held by the corresponding sectors under the book-entry system, divergence ratios between the book value and the face value are calculated¹⁰. Then, the amount outstanding on a book value basis in individual sectors is converted into face value basis by using the divergence ratios. Finally, the amount outstanding is converted into the market value basis by multiplying the amount on a face value by the market price of government securities (see the following chart for details).

Transaction flow in this category is recorded using term-on-term difference in the face value. The divergence between the term-on-term difference in the stock data on a market value and the transaction flow data is posted as a reconciliation amount.

⁹ Transaction flows related to nonresidents' holding of government securities are based on *the Balance of Payments Statistics* and are not term-on-term difference at face value.

¹⁰ In order to calculate the divergence ratio between the book value and the face value of financial institutions more adequately, the holding amount of nonresidents on a face value, which is estimated from *the Balance of Payments Statistics* and *the International Investment Position of Japan*, is also used in the ratio.

Reconciliation of central government securities and FILP bonds



- (1) Face value after subtracting those held by central government etc., from total value issued (face value holdings of financial institutions).
 (2) Book value summed up from financial statements of financial institutions, etc. (book value holdings of financial institutions).

A: Calculate the face value/book value ratio (13:10)

B: Multiply financial statements data build up for each sector by the face value/book value ratio (e.g. Social security funds: $2 \times 1.3 = 2.6$)

C: Post the same amounts

D: Multiply the market price index (1.13)

Shaded area is the data used for the calculation of flow.

Notes:

- As shown above, the conversion of the amount outstanding on a book value basis into a face value basis for individual sectors employ a certain divergence ratio, which is calculated by comparing the total of central government bonds held by financial institutions in book value basis, the total acquired from financial statements, and those in face value basis which are the total of registered data of the same institutions. Thus, the FFA does not reflect the differences of book values among individual sectors. The holding amount of government securities by Fiscal Loan Fund regards a book value and a face value the same.
- The FFA regards "Repurchase agreements and securities lending transactions with cash collateral" as "Transfer of funds backed by government securities and treasury discount bills" and treats the ownership of government securities does not change. In the corporate accounting, the treatment of *gensaki* transactions changed from trade transaction to financial transaction since fiscal year 2000/2001, and thus became in line with the treatment of the FFA. On the other hand, the summary sheet of registered government bonds and clearing government bonds and the research on registered government bonds by holder have changed the name of government securities by this transaction, and thus the holding amount of government securities are different from the amount of each sector in the FFA. In addition, there may be certain estimation errors due to lack or limitation in data and the differences of the definitions between the data.

D-c. Local government securities (last update: October 2013)

“Local government securities” is the sum of local government bonds issued by ordinary accounts (classified under local governments) and local public enterprises accounts of local governments (classified under public nonfinancial corporations). The total amount is calculated by aggregating the amounts of registered, book-entry, and bearer bonds. The amount of registered bonds is based on the annual data of the balance of the registered bonds. The amount of book-entry bonds is based on the *Issue, Redemption and Outstanding* published by the Japan Securities Depository Center. The amount of bearer bonds is assumed to be proportional to the amount of registered and book-entry bonds.

For the issuing entity (amount outstanding on the liabilities side), the amount issued by local public enterprises is estimated using the *Overall Financial Report of Local Public Enterprises*. The rest are regarded as those issued by local governments.

For the holding entity (assets side), the holding amounts of financial institutions and public nonfinancial corporations are based on the financial statements of these institutions; the holding amount of households is based on data of the amount outstanding of Residential Local Government Bonds published by the Japan Local Government Bond Association. The holding amounts of private nonfinancial corporations, local governments, and the NPISH are estimated using data from bond-registering institutions.

The amount outstanding is converted to market value by multiplying the acquired source data (assuming all figures are evaluated on a face value) by the market price of local government securities. The transaction flow, on the other hand, is recorded using term-on-term difference on face value. The difference between the term-on-term difference in the stock data and the transaction flow data, for the portion caused by the conversion into the market value basis, is posted in the Reconciliation Table¹¹.

Note:

Because the total issuing amount of local government securities are estimated under a certain postulation, as mentioned above, it is necessary to note that estimates may entail inaccuracies.

¹¹ The outstanding amounts of local government securities (assets) of the "securities investment trusts" and "postal savings" sectors (from the first quarter of 2003 to the third quarter of 2007) are recorded from data on a market value basis due to the availability. Transaction flows of these sectors are posted using the term-on-term difference of the term-end outstanding—which is converted to a face-value basis— by using a market-price-to-face-value ratio.

D-d. Public corporation securities (last update: February 2011)

The total of “Public corporation securities” is based on *the New Issue Volume and Value of Outstanding Bonds* compiled by Japan Securities Dealers Association (JSDA).

Issued amounts by sector (liabilities side) are based on the list of bonds issued compiled by the JSDA and the financial statements of bond issuing entities.

Of the holding entity in this category (assets side), the holding amount of financial institutions and public nonfinancial corporations is based on the financial statement of these institutions, while the holding amount of nonresidents (overseas sector), local governments, private nonfinancial corporations, and NPISH is based on the data from bond-registering institutions. Public corporation bond certificates (unregistered bonds) are estimated by taking the difference between the total of bond issued and the bond registration data that are regarded as the holding of households.

The amount outstanding on a market value is posted by multiplying the acquired source data (assuming all figures are evaluated on a face value) by the market price index. The transaction flow, on the other hand, is recorded using term-on-term difference on face value. The divergence between the term-on-term difference in the stock data and the transaction flow data, for the portion caused by the conversion into the market value basis, is posted in the Reconciliation Table¹².

D-e. Bank debentures (last update: August 2006)

For “Bank debentures,” each of discount bond and interest-bearing bond is based on *the New Issue Volume and Value of Outstanding Bonds* compiled by Japan Securities Dealers Association.

Issued amounts by sector (liabilities side) in this category are estimated from the financial statement of bond issuing institution.

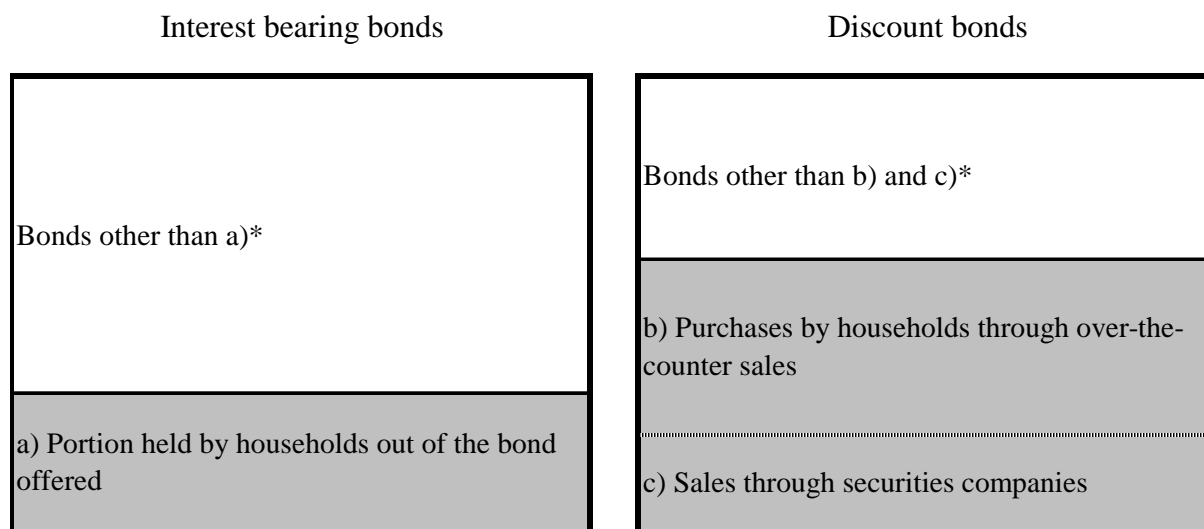
Of the holding entities (assets side) in this category, the holding of financial institutions and public nonfinancial corporations are based on the financial statements of these institutions, while the holding of nonresidents (overseas sector), local governments, private nonfinancial corporations, and NPISH are estimated from the data from bond-registering institutions.

The holding amount of households includes: (1) interest-bearing bonds that are bought by households through the over-the-counter sales of bond-issuing financial institutions,¹³ (2) discount bonds that are sold through securities companies, and (3) interest bearing bonds sold to households (majority of underlying bonds). See the following chart for the explanation. In addition, the residuals with no specific holding sector are regarded as the holding amount of private nonfinancial corporations.

¹² The outstanding amount of public corporation securities (assets) of the “postal savings” sector (from the first quarter of 2003 to the third quarter of 2007) is recorded from data on a market value basis due to the availability. Transaction flows of this sectors is posted using the term-on-term difference of term-end outstanding— which is converted to a face-value basis—, by using a market-price-to-face-value ratio.

¹³ When the financial instruments are traded frequently, the estimation for the holding amount at a certain time is not necessary appropriate. The FFA, however, employs this approach only for the interest-bearing bonds in households, assuming that households normally keep the bonds until the maturity.

Estimation of households' holding amount of bank debentures



Shaded area indicates the portion held by households (a+b+c).

* The holding amounts of financial institutions, nonfinancial corporations, and nonresidents ,etc are estimated from the financial statements of these sectors and the data from bond-registering institutions etc.

The amount outstanding evaluated on a market value is calculated by multiplying the acquired data source (regarding all are evaluated on a face value basis) by the market price of bank debentures. The transaction flow, on the other hand, is recorded using term-on-term difference on a face value¹⁴. The divergence between the term-on-term difference in the stock data and the transaction flow data, for the portion caused by the conversion into the market value basis, is posted in the Reconciliation Table.

D-f. Industrial securities (last update: October 2013)

As for “Industrial securities,” publicly placed straight bonds issued domestically by corporations and convertible bonds with share options are based on the *Issuing, Redemption and Outstanding Amounts of Bonds* compiled by the Japan Securities Dealers Association (JSDA), while privately placed corporate straight bonds are based on the *Issue, Redemption and Outstanding* released by the Japan Securities Depository Center (JASDEC). In addition, privately placed bonds backed by nonfinancial assets are estimated based on “Asset Backed Bonds (Private Offering)” released in the same source by the JASDEC.

The issue amount by sector (amount outstanding on the liabilities side) is based mainly on the *Issuing, Redemption and Outstanding Amounts of Bonds* compiled by the JSDA and the financial statements of bond issuing entities.

For holding entity (assets side), the holding amounts of financial institutions and public nonfinancial corporations are based on the financial statement of these institutions, while the holding amounts of nonresidents (overseas), private nonfinancial corporations, and NPISH are estimated from the data of bond-registering institutions.

¹⁴ The FFA records the interests and the reinvestments of discount bonds on accrual basis where unamortized outstanding of bond premium is added to the outstanding on a face value.

The amount outstanding evaluated on a market value is calculated by multiplying the acquired source data (regarding all are evaluated on a face value) by the market price of industrial securities. The transaction flow, on the other hand, is recorded using term-on-term difference on face value. The divergence between the term-on-term difference in the stock data and the transaction flow data, for the portion caused by the conversion into the market value basis, is posted in the Reconciliation Table.

D-g. External securities issued by residents (last update: December 2012)

The total value of straight bonds in “External securities issued by residents” is based on *the International Banking and Financial Market Developments* (data on securities issuing in foreign securities markets by issuing country) published from the Bank for International Settlements (BIS). Foreign-currency denominated source data is converted into Japanese yen, based on the period end rates.

For issuing entity (amount outstanding of liabilities side), the issue amounts of private nonfinancial corporations are the total less (1) the issue amounts of financial institutions (banks, insurance companies, finance companies, securities companies etc) that are based on financial statements and data on issued bonds of individual entities (data are obtained from I-N Information Systems, “Funding View” etc), (2) the issue amounts of public nonfinancial corporations, local governments, and public financial institutions based on the data on government-guaranteed external bonds and information on the issue amounts released by issuers.

For holding entity (assets side), the holding amounts of financial institutions (banks, insurance companies, and pension funds) and social security funds are estimated from the financial statements (regarding those as the amounts circulated in the domestic market). The residual with no specific holding entity is posted as the portion held by nonresidents (regarding those as the amounts not circulated in the domestic market).

Foreign currency-denominated outstanding on face value basis is converted into yen-denominated outstanding by each currency, while transaction flow is recorded using yen conversion of term-on-term difference of the foreign currency-denominated outstanding. The divergence between the term-on-term difference in the stock data and the transaction flow data, which is caused by the yen conversion by using the end-of-term exchange rate (for stocks) and the average exchange rate (for transaction flows), is posted in the Reconciliation Table.

Note:

All reconciliation amounts, raised by the exchange rate fluctuation, are assumed to be the portion circulated only in domestic markets (i.e. there is no exchange gains/losses of the holding entities in overseas sector).

D-h. Commercial paper (last update: October 2013)

The total amount of “Commercial paper (CP)” is calculated by deducting the amount outstanding of the ABCP from the total issue amounts of CP in the book-entry transfer system whose data are released by the Japan Securities Depository Center.

For issuing entity (liabilities side), the issue amounts of private nonfinancial corporations are the total amount of CP less the issue amounts of financial institutions (domestically licensed banks, insurance companies and nonbanks) and public nonfinancial corporations that are based on the financial statements of these institutions.

For a holding entity (assets side), the holding amounts of financial institutions (banks, insurance companies, securities investment trusts, and financial dealers and brokers etc.), social security funds, and public nonfinancial corporations are based on the financial statements of these institutions and on *Deposits, Vault Cash and Loans*. The residual with no specific holding entity is posted as the portion held by private nonfinancial corporations.

The amount outstanding in this category is evaluated on a face value, while the transaction flow is recorded using term-on-term difference in that value.

D-i. Investment trust beneficiary certificates (last update: October 2013)

The total of “Investment trust beneficiary certificates” is derived from data on investment trusts (*Changes in Assets of Publicly Offered Investment Trusts of Contractual Type, etc.*) compiled by the Investment Trusts Association, the aggregate market price of REIT published by the Tokyo Stock Exchange, and other sources.

Issuing entities (liabilities side) in this category are stock investment trusts, bond investment trusts, MMF, MRF, and private nonfinancial corporations. Amounts are classified into each sector in accordance with the characteristics of the instrument.

For holding entity (assets side), the holding amounts of financial institutions (banks, insurance companies, and finance companies), social security funds, and public nonfinancial corporations are based on the financial statement of these institutions, while the holding amounts of households and NPISH are based on the characteristics of instruments and the data on amounts of sales by sector published by Investment Trusts Association (*the Distribution of Beneficial Certificate Holders (Initial Offering)* etc.). The residual with no specific holding entity is posted as the portion held by private nonfinancial institutions.

Basically, the amount outstanding in this category is evaluated at the market price, while the transaction flow of sectors is recorded either using changes in assets (sales-repurchases-redemptions) of each product category or the end of term-on-term difference of the amount outstanding of principal on a face value basis (estimated separately by the Bank of Japan). The divergence between the term-on-term difference in the stock data on a face value and the transaction flow data is posted in the Reconciliation Table.

D-j. Trust beneficiary rights (last update: October 2013)

Figures for “Trust beneficiary rights” are estimated by accumulating “Collectively managed designated money trusts” plus “Loan trusts” (both trusts are recorded in collectively managed trusts sector)¹⁵.

Issuing entity (liabilities side) in this category is “Collectively managed trusts.”

For holding entity (assets side), the holding amounts of financial institutions (banks, insurance companies, finance companies, collectively managed trusts, government financial institutions etc.) and social security funds, and central government (some of government-affiliated public corporations, authorized organizations, and independent administrative institutions) are based on

¹⁵ Trust beneficiary rights associated with investment trusts are not posted under this category, but under “investment trust beneficiary certificates.”

the financial statement of these institutions. The holding amounts of households and local governments are estimated by the characteristics of instruments and the data from trust banks. The residual with no specific holding entity is posted as the portion held by private nonfinancial institutions.

In estimating the holding amounts of households, part of collectively managed designated money trusts and loan trusts is proportionally allocated based on sales data. At the same time, loans trusts sold to households, employees' property formation benefit trusts, employees' property accumulation investment trusts, and monetary investment fund trusts are all allocated to households¹⁶.

The amount outstanding in this category is evaluated on a face value, while the transaction flow is recorded using term-on-term difference in that value.

Note:

Under "Trust beneficiary rights," the amount of designated noncollectively invested money trusts and specified money trusts less the consolidated amounts was recorded prior to the revision of sectoral classification in March 2007. In line with this revision, the "Non-collectively managed trusts" sector was eliminated and the assets of "Designated non-collectively invested money trusts" and "Specified money trusts" were consolidated with the original investors. Thus "Trust beneficiary rights" covers only "Collectively managed designated money trusts" plus "Loan trusts."

D-k. Structured-financing instruments (last update: October 2011)

The total of "Structured-financing instruments" is estimated in accordance with the type of instrument. More specifically, AB (asset-backed) domestic corporate bonds (public offering) and AB *samurai* bonds are based on the *Issuing, Redemption and Outstanding Amounts of Bonds* compiled by the Japan Securities Dealers Association. Monetary claim trust beneficiary rights are estimated using data on fiduciary assets of trust beneficiaries of financial institutions and financial data on entrusted assets by trust companies. The ABCP is based on the *Outstanding Amounts of CP by Issuer's Category* released by the Japan Securities Depository Center (JASDEC). AB domestic corporate bonds (private offering) are calculated by estimating the amounts backed by monetary claim from "Asset Backed Bonds (Private Offering)" in the *Issue, Redemption and Outstanding* released by the JASDEC.¹⁷

For holding entity (assets side), the holding amounts of financial institutions such as banks, insurance companies, and finance companies, and social security funds are based on the financial statement of these institutions. On the other hand, the holding amounts of nonresidents are estimated by multiplying a certain ratio calculated from past questionnaire survey to securities companies. The residual with no specific holding entity is posted as the portion held by private nonfinancial institutions.

The amount outstanding in this category is evaluated either on a face or book value basis, while the transaction flow is recorded using the term-on-term difference in that value.

¹⁶ Employees' property formation benefit trusts, employees' property accumulation investment trusts, and monetary investment fund trusts are commonly used for accumulating retirement benefits, but these trusts are not entrusted to other funds like former qualified retirement pension plans. Therefore, the FFA does not regard these as pension funds.

¹⁷ The amounts backed by nonfinancial assets are estimated by using the same source data and are recorded in industrial securities issued by private nonfinancial corporations.

D-I. Mortgage securities (last update: August 2006)

The total of “Mortgage securities” is based on the financial statements of mortgage securities companies¹⁸ and is posted to finance companies.

For a holding entity (assets side), the holding amounts of financial institutions such as banks (financial institutions for agriculture, forestry, and fisheries), insurance and pension funds are based on the financial statement of these institutions, while the holding amounts of private nonfinancial corporations and households are estimated by taking the difference between the total of mortgage securities and the holding amounts of financial institutions, multiplied by a certain ratio.

The amount outstanding in this category is evaluated on a face value, while the transaction flow is recorded using term-on-term difference in that value.

E. Shares and other equities (last update: August 2006)

“Shares and other equities” equals the sum of breakdowns (shares and equities).

E-a. Of which: shares (last update: August 2006)

The total of “Of which: shares” is based on the data on the market value outstanding estimated from the number of shares listed, stock price of individual companies and the capital raised data (*Equity Financing by Publicly Held Companies*).

The amount outstanding and the transaction flow in this category are estimated independently. The estimation of transaction flow is conducted separately by the new issues of shares (data are obtained from I-N Information Systems, “Funding View” etc) and the trade in existing shares (see below).

Components covered

	Stocks listed on a Stock Exchange
Amount outstanding of shares	Total amounts of stock issues (market value)
Transaction flow of the new issues of shares	<ul style="list-style-type: none">• Amounts of equity raising by issuing new stocks• Exercised amounts of bonds with right to reserve new stock• Stocks newly listed on a Stock Exchange
Transaction flow of the trade of existing shares	Amounts traded
Shares acquired by the issuing company (minus flows)	Estimated are made only for those whose source data is available

Estimations for individual sectors are as follows.

● Amount Outstanding

Amount outstanding of issuing entity (liabilities side) in the FFA corresponds to the amount outstanding at market price, estimated from the number of shares listed and the stock price of individual companies¹⁹.

¹⁸ Until the Japan Mortgage Securities Association was dissolved in June 2005, the total of “mortgage securities” was based on the amount outstanding of sales of mortgage securities, compiled and disseminated by the association.

¹⁹ Amount outstanding of shares listed of issuing entity (liabilities side) posted on the FFA was based on the monthly statistics report of the Tokyo Stock Exchange until 2004. Total amount outstanding was based on the total market value outstanding and amount outstanding of individual sectors was based on the total market value outstanding by industry. Each correspondence is listed as follows. We have started estimating the amount outstanding at market price from the number of shares listed and the stock price of individual companies, since the monthly statistics report was no longer aggregated.

For holding entity, holding amounts of each sector are estimated by using *the Shareownership Survey*, while the amount outstanding of the breakdown of financial institutions is based on financial statements of individual financial institutions.

- Issues and subscription of stocks

Amounts issued by sector (liabilities side) are based on the accumulation of “amounts of fund raising by mean of issuing new stocks” and “exercised amounts of bonds with right to reserve new stock.”

Amounts subscribed by sectors (assets side) are estimated by allocating the transaction flow proportionally to individual sectors by multiplying the ratio of holding amounts of each sector respectively. Large-denomination equity raisings with specifiable subscribing entity, such as privatization of public corporation and injection of public money into financial institutions and direct investments by nonresidents, are specified individually for both issuing entity and receiving entity.

- Trades of existing shares

Amounts traded are based on the data on the trading in the Stock Exchange market (*the Trading Volume & Value by Types of Investors*). Due to the limitations of source data, transaction flows are allocated proportionally to the breakdown of financial institutions by using the changes in amount outstanding on a book value that are based on financial statements.

The amount outstanding in this category is evaluated at market price. The divergence between the term-on-term difference in the stock data and the transaction flow data, which corresponds to the portion caused by price change, occurs due to the separate estimation of the stock and the transaction flow data. This divergence is treated as a reconciliation amount that is allocated proportionally to individual sectors in accordance with their previous term outstanding.

End-of-quarter outstanding, except end of March, in individual sectors are calculated by taking the sum of transaction flow of the sector, reconciliation amounts allocated to the sector, and amount outstanding of the sector in the previous term.

Notes:

- (1) The calculation of transaction flow in the breakdowns of financial institutions is based on the change in the amount on a book value that is acquired from the financial statements of individual sectors. The difference between its total and the total of sale/purchase amounts of the financial sector, which is based on the data on trading in Stock Exchange market (*the Trading Volume & Value by Types of Investors*), is allocated proportionally to individual

The amount outstanding at market price by sector

“Banking industries”
 “Securities industries”
 “Insurance industries”
 “Other financial industries”

The FFA

⇒ Domestically licensed banks
 ⇒ Securities companies
 ⇒ Private life insurance companies and
 Private nonlife insurance companies
 ⇒ Finance companies

sectors in accordance with their previous term outstanding. Thus, the transaction flows may be overestimated if the book values rise due to, say, cross trading.

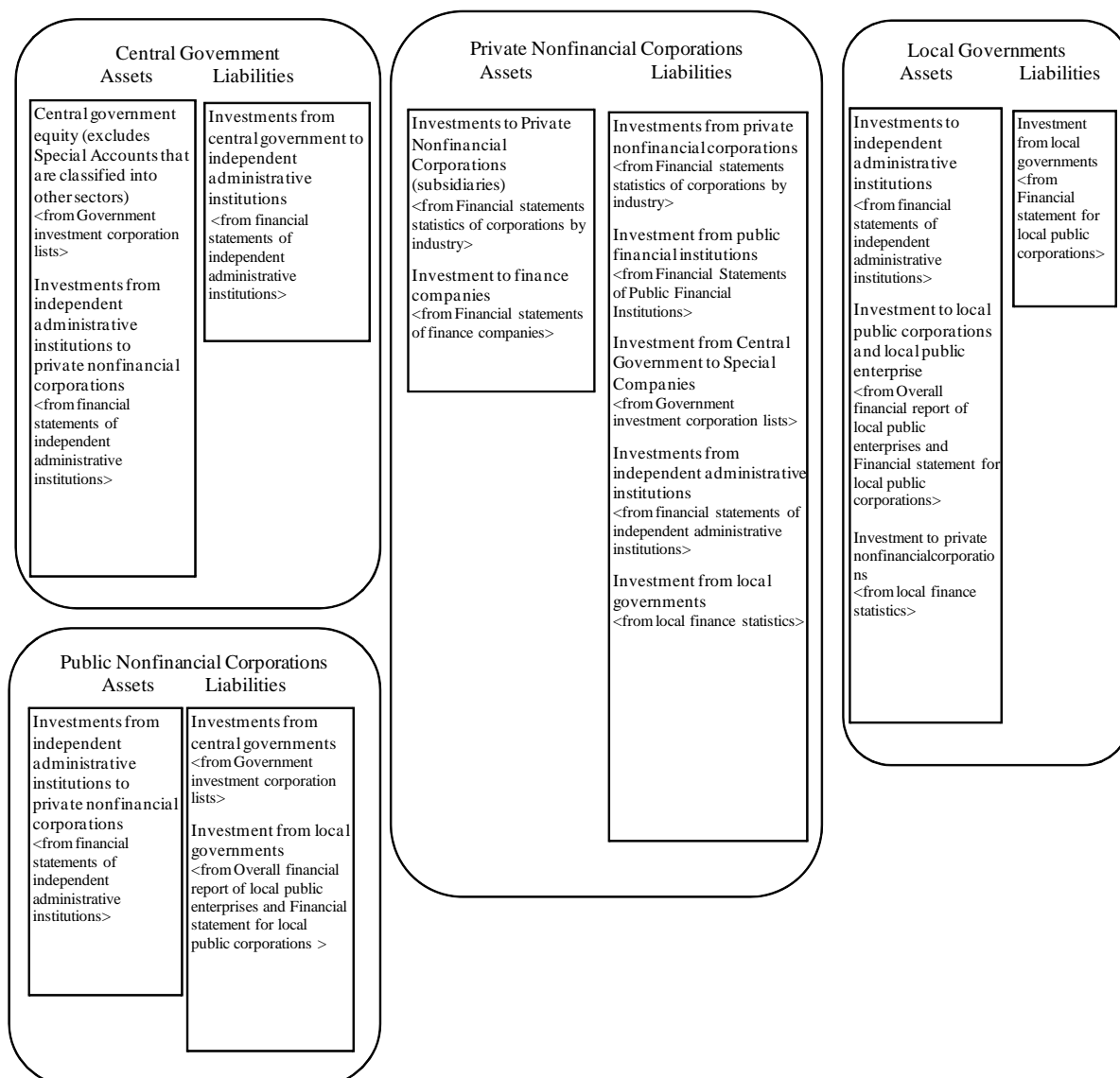
- (2) Since the data on distribution of shares is limited to year-end outstanding, the estimation for quarterly term-end outstanding by sector employs the accumulation of transaction flow and reconciliation amount. Thus, the statistical discrepancies occurring when allocating transaction flows and reconciliation amounts to individual sectors may be contained in term-end outstanding. End-of-quarter data for the past year is revised retroactively after acquiring data on distribution of shares in the following annual revision conducted every March.
- 3) Although treasury purchase (shares acquired by the issuing company) should be reflected as transaction flows that decrease amount outstanding of shares, only some are posted due to limitation of source data. Those that are not posted in the transaction flows, are posted in Reconciliation Table as a decrease in amount outstanding that are not caused by financial transactions.

E-b. Equities (last update: August 2014)

The total of “Equities” is estimated by the data accumulation of equity contribution, which is based on financial statements, and by *the Financial Statements Statistics of Corporation by Industry*.

Amongst various contributing entities (assets side) and receiving entities (liabilities side), investments from public sectors are specified from contributing entity, while investment from private sectors are specified from receiving entity (see below).

Estimation of equity of main sectors



● Investments by central government

Equity contributions to public institutions (government financial institutions, and public nonfinancial corporations) and to special companies (private nonfinancial corporations) by

central government are based on the list of government investments²⁰.

- Investments by local governments

Equity contributions to public institutions by local governments (public nonfinancial corporations, and private nonfinancial corporations) are based on the statistics on local government finance.

- Investments in private nonfinancial corporations (unlisted stocks)

Equity contributions to private nonfinancial corporations refer to the contributed capital (shareholders' equity and capital surpluses) based on *the Financial Statements Statistics of Corporation by Industry*. For the contributors in this category, the holding amounts for each sector are specified by using data on equity capital by scale in *the Financial Statements Statistics of Corporation by Industry*, and the ratio of holding amounts of listed stocks, acquired from *the Shareownership Survey*.

For unlisted stocks, the amount outstanding is evaluated on market-equivalent value²¹, while transaction flow is based on increase/decrease of contributed capital outstanding (from *the Financial Statements Statistics of Corporation by Industry*) assuming that trade does not exist between corporations and individuals.

- Investments in private nonfinancial corporations (equities invested in privately placed real estate funds)

The total amount of equities invested in privately placed real estate funds is estimated based on market surveys on privately placed real estate funds²². The contributed amounts of each sector are estimated by using source data on the attributes of equity investors, etc.

- Preferred stocks of domestically licensed banks by injection of public fund

For preferred stocks of domestically licensed banks by injection of public funds, issued amount deducting redemption in each period and amount outstanding are calculated based on press release. However, its market-equivalent value is not estimated due to limitation of source data.

²⁰ Equity contributions to international organizations are, in principle, treated as "other external claims and debts."

²¹ Its market equivalent value is estimated by comparing profit, net assets and dividends of listed companies of similar business type and by the market price listed on the stock exchange.

²² The Survey of ARES Members on Real Estate Private Funds released by the Association for Real Estate Securitization (ARES) and the Survey on Private Real Estate Funds in Japan released by Sumitomo Mitsui Trust Research Institute Co., Ltd are mainly used for estimation.

F. Financial derivatives

F-a. b. Forward-type instruments and Option-type instruments (last update: February 2011)

“Financial derivatives” is based on the financial statement of financial institutions etc. and statistics related to financial derivatives. Exchange-traded derivatives and OTC-traded derivatives are estimated individually by using financial statements, the Exchange market data (*the Key Statistics for Government Bond Futures & Trading of Nikkei 225 Options by Type of Investors* and *the Trading Volume and Open Interest of Options on Three-Month Euroyen Futures*), the report on derivative transaction (*The Results of the Regular Derivatives Market Statistics in Japan*) etc. This category does not include the Exchange-traded forward-type instruments.

The components estimated in financial derivatives

	Transactions in Stock Exchange	OTC Transaction
Forward-type (market price)	Not included, due to market-to-market settlements on daily basis	Included: forward rate agreements (FRAs), interest rate swaps, currency swaps, exchange contracts, foreign exchange margin transactions etc.
Option-type (market price; Change in the amount outstanding of option premiums)	Included: government bond options, short-term yen interest futures options, stock price index options (TSE Stock Price Index options, and Nikkei Stock Average options).	Included: bond options, currency options, interest rate options, caps, floors etc.

Assuming that OTC-traded derivatives transactions are made mainly via domestically licensed banks, the estimation is conducted in a manner that amount outstanding of domestically licensed banks are allocated proportionally to insurance and pension funds, securities investment trusts, nonbanks, securities companies, private nonfinancial corporations, and overseas (this is made to specify the holders of assets/liabilities in banks). More specifically, holding amounts of domestically licensed banks are based on the financial statement and the report on derivative transaction (*the Results of the Regular Derivatives Market Statistics in Japan*), while the holding amounts of insurance companies, nonbanks, securities companies, and central government are based on the financial statements of individual institutions. Holding amount of other financial institutions and overseas is estimated using the outstanding ratio by counterparties acquired from *the Foreign Exchange and Derivatives Survey* (conducted once in three years). Residuals are regarded as the portion held by private nonfinancial institutions. The amount outstanding of foreign exchange margin transactions is estimated by using the financial statements of major foreign exchange margin trading firms, etc. and is allocated to households and private nonfinancial corporations.

Exchange-traded derivatives are based on the financial statements of the institutions stated above and the Exchange market data (*the Key Statistics for Government Bond Futures & Trading of Nikkei 225 Options by Type of Investors* and *the Trading Volume and Open Interest of Options on Three-Month Euroyen Futures*).

The amount outstanding in this category is evaluated at the market price. Settlement of market value that cause change in cash should be posted as transaction flow, but due to limitation of source data, they are not posted for both the forward- and option-type²³, and all term-on-term differences of amount outstanding are posted as reconciliation amounts.

²³ However, until the second quarter of 2000, only the term-on term difference in the acquisition cost of the option premium (the outstanding that is not reflected by the fluctuation of market price) is posted as transaction flow.

Notes:

- (1) For OTC-traded derivatives, the data organized on a residency basis (in which the transaction parties are distinguished by residents/nonresidents) are unavailable, while the only available source data is the data on a consolidated basis (in which overseas sectors are consolidated into the sectors in Japan where transaction parties are not distinguished by residents/nonresidents). Accordingly, the residents-nonresidents ratio, which is acquired from the *BIS Financial Derivatives Survey* of 1995, is used as a benchmark. Those market data do not cover the scope of whole financial derivatives.
- (2) Financial statements data are used for estimating the amount outstanding of forward-type and option-type instruments. In many cases, however, only half-year data (end of March, and September) are available. For the unavailable quarters (end of June and December), data are estimated based on changes in the total amount at market value and changes in contractual obligations related to financial derivative transactions.
- (3) Although real amounts (settlement price) of market value and the amount of option premium of the option type instruments are to be recorded as transaction flow, these are posted as reconciliation amounts together with the change in market price, due to the limitations of source data. Although the real amounts of transaction between residents and nonresidents (cross border transaction) are available from the *Balance of Payments Statistics*, the amounts have not been posted currently in the FFA.

G. Insurance and pension reserves

G-a. Insurance reserves (last update: August 2014)

“Insurance reserves” is based on the financial statement of the institutions in insurance sector and insurance company liability reserves and reserves on mutual contract, recorded in the financial statements. Figures are posted under the liabilities side of life insurance sector, nonlife insurance sector, and mutual aid insurance sector. Holding entity of this category is households²⁴.

As only the reserves on saving-type insurance are posted under financial assets/liabilities, reserves on term-type insurance and pension reserves are excluded in the FFA. For reserves for policy owner dividends, since these are accumulated to provide dividends to employees (policyholders) based on provision and insurance clause, a part related to insurance contract is posted under insurance reserves²⁵. More specifically, for life insurance products, reserves on saving-type insurance are estimated by deducting catastrophe reserves and unearned premium reserves from the whole insurance liability reserves²⁶, to which reserves for policy owner dividends are added. For non-life insurance products, on the other hand, insurance liability reserves with maturity refunds are based on repayment reserves and reserves for dividend to policyholders (see the following chart).

As reserves for pensions are posted under “Pension reserves,” they are not included in this item.

²⁴ Economic profits from saving-type insurance policies are assumed to belong to households.

²⁵ For reserves for policy owner dividends, fiction is created that insurance companies first pay its surplus to the policyholders as claims paid, and then it is reinvested in the insurance reserves by the policyholders. This fiction is reflected in the transaction flows of household sector.

²⁶ For life insurance products, since there are various types of products that are mixtures of saving-type and term-type insurance, the calculation of liability reserves on saving-type insurances without including term-type insurance is not an easy undertaking. This extraction is assumably done by excluding catastrophe reserves and unearned premium reserves from liability reserves.

(in Social Accounting)		Items	Contents	Treatment in the FFA
Saving-type insurance → Financial transactions		Reserves for outstanding claims	Unpaid insurance claims	Accounts receivable/payable
		Liability reserves		
Regard these items as insurance services		Reserves for maturity returns	Savings for future payment of insurance claim	Insurance reserves
		Unearned premium reserves	Insurance premiums for unpassed period	Accounts receivable/payable
		Catastrophe reserves	Reserves for payment of insurance claim in case of emergency	(not included)
		Reserves for policy owner dividends	Savings for dividend payment to the contractor	Insurance reserves

The amount outstanding in this category is evaluated on a book value basis, while the transaction flow is recorded using term-on-term difference in that value. However, regarding the insurance reserves in the life insurance sector, changes in liability reserves generated by capital gains and losses associated with fluctuations in the market value of assets or with foreign exchange valuation, are recorded as reconciliation amounts²⁷.

Notes:

Since financial statements provide the data on insurance company liability reserves only at the year-end, the FFA estimates the end-of-quarter outstanding of liability reserves by multiplying the past growth rate. Therefore, the data are revised retroactively in the following annual revision, conducted every March, after obtaining the following end-of-term financial statements. For the institutions with trivial amount of reserves, however, it is assumed that there is no increase/decrease of reserve during the year.

G-b. Pension reserves (last update: August 2014)

“Pension reserves” are reserves accumulated by corporate pensions and other pension funds to pay benefits to policyholders in the future, or by life insurance to prepare for future payment of individual pensions.

“Pension reserves” aggregates the amount outstanding of fiduciary assets in Trust Account of trust banks, life insurance companies, and investment management companies, the data in financial statement of “Other pensions,” and the liability reserves for personal pension product recorded in the financial statement of life insurance companies. Unfunded retirement benefit obligations are also recorded as pension reserves based on consolidated financial statements of listed companies. These are posted under the liabilities side of corporate pensions, other pensions, life insurance, and mutual aid insurance. Holding entity of this category is households.

For the amount outstanding in this category, holding assets of corporate pensions and National pension fund, and liability reserves of private pension other than corporate pensions and National

²⁷ Profits and losses in the separate accounts of individual insurance are estimated by using data released by the Life Insurance Association of Japan and financial statements of each life insurance company.

pension fund are posted respectively on a book value.

For the reconciliation amount, the total amount of levy on dissolved employees' pension fund listed in financial statements of the Welfare Insurance Special Account and the payment in kind based on Defined-benefit Corporation Pension Law are posted as the amount of entrusted portion of the employee pension funds returned to the government. And since those data are acquired only on an annual basis, the FFA estimates the amount of each quarter by using the number of beneficiaries and the number of employees' pension funds that returned the entrusted portion to the government. Thus, the reconciliation amount is revised retroactively in the following annual revision, conducted every March, after the previous fiscal year data are obtained.

Regarding the pension reserves in the life insurance sector, changes in liability reserves generated by capital gains and losses associated with fluctuations in the market value of assets or with foreign exchange valuation, are also recorded as the reconciliation amount in this category²⁸.

In addition, every term-on-term difference in the amount outstanding of retirement benefit obligations is recorded as the reconciliation amount since the source data are insufficient for distinguishing the transaction volume from the reconciliation amount.

Transaction flow is thus recorded as term-on-term differences in the amount outstanding minus the reconciliation amount.

Notes:

- (1) Profits earned by investing pension assets, which are reserved in fiduciary institutions, are included in this category. Undistributed profits from trust account of mother funds are also included in the reserves of individual pension funds, such as employees' pension funds, former qualified retirement pension plans, and national pension fund, in accordance with the investment outstanding to mother funds.
- (2) For "Other pensions," the financial statements provide the data only at the end of year. For certain corporate funds, the amount outstanding of fiduciary assets is available only at the end of year. In this case, end-of-quarter outstanding is estimated by multiplying end-of-year outstanding by the growth rate of investment assets outstanding. For institutions with trivial amount of reserves, however, it is assumed that there is no increase/decrease of reserve during the year.
- 3) Data of liability reserves of personal pension insurance can only be obtained at the year-end, and therefore end-of-quarter outstanding is estimated using past growth rate. Thus, the data are revised retroactively in the following annual revision, conducted every March, after the end-of-year data is obtained.

H. Deposits money (last update: December 2012)

In "Deposits money," deposits with evident origin of payment are recorded -- such as margins, deposits to agents, building tenancy guarantees, deposits to golf courses, employees' deposits to companies, deposits for withholding tax, electronic money, prepaid cards, and outstanding amount of monetary donations related to the Great East Japan Earthquake which has yet to be distributed to

²⁸ Profits and losses in the separate accounts of annuity insurance are estimated by using data released by the Life Insurance Association of Japan and financial statements of each life insurance company.

sufferers -- based on individual source data including *Report on Property Tax* (Ministry of Internal Affairs and Communications), *Survey of Selected Service Industries* (Ministry of Economy, Trade and Industry), *Report on Intra-Company Deposits* (Ministry of Health, Labour and Welfare), *Recent Developments in Electronic Money in Japan* (Bank of Japan, available in Japanese only), *The trend of the prepaid instruments* (Financial Service Agency, available in Japanese only), and *About the monetary donation* (Ministry of Health, Labour and Welfare, available in Japanese only). Deposits to financial institutions record deposits shown in the financial statements of these institutions. Withholding income tax data are based on the *Taxes and Stamp Revenues* and is regarded as deposits money of the central government to financial institutions and nonfinancial corporations, where it is assumed that income taxes are paid by households but kept at corporations as of the previous quarter-end.

For deposits with evident origin of payment, issuing entity (liabilities side) and holding entity (assets side) are specified by the origin of payment. On the other hand, deposits with uncertain origin, which is recognizable from the financial statement of financial institutions, are regarded as deposits with private nonfinancial corporations.

The amount outstanding in this category is evaluated on a face value, while the transaction flow is recorded using term-on-term difference in that value.

I. Trade credits and foreign trade credits (last update: August 2006)

Assets and liabilities of private nonfinancial corporations in this category are based on *the Financial Statements Statistics of Corporation by Industry*. On the other hand, assets and liabilities of overseas are based on *the Balance of Payments Statistics* and *the International Investment Position of Japan*, specified together with the institutions of central government that are the counterparties of trading. The difference between the total assets and the total liabilities is regarded as credit facilities to sole proprietorships that is posted under household sector (regularly, on liabilities side).

The amount outstanding in this category is evaluated on a face value, while the transaction flow is recorded using term-on-term difference in that value. Reconciliation amount in this category results from the change in the sample of *the Financial Statements Statistics of Corporation by Industry*, and from the deviation between *the Balance of Payments Statistics* (flow) and *the International Investment Position of Japan* (stock).

Notes:

- (1) Since *the International Investment Position of Japan* only provides annually based term-end outstanding, the quarterly based term-end outstanding of overseas and central government is estimated by building up the amount of change, from *the Balance of Payments Statistics*, on the amount outstanding recorded in *the International Investment Position of Japan*. As a result, the deviation between the built-up amount of flow and the stock amount at the end of next year occurs that is posted as a reconciliation amount.
- (2) For private nonfinancial corporations, the reconciliation amount is posted that is caused by the fluctuation of amount outstanding as a result of changes in the sample of source data.

J. Accounts receivable/payable (last update: October 2013)

In this category, the total of tax receivable/payable is based on the statistics on tax and stamp revenue (*the Taxes and Stamp Revenues*), while the total of interest receivable/payable is based on

the financial statement of financial institutions. The total of unearned premiums and outstanding claim reserves is based on the financial statement of insurance companies. The total of customer loyalty award credits is based on the allowance for point gift certificates in the financial statements of issuing companies. Unfunded retirement benefit obligations are recorded based on consolidated financial statements of listed companies. Of these, income tax (the portion of final return), consumption tax, and corporate tax, of those already delivered, are based on the statistics on tax and stamp revenue (*the Taxes and Stamp Revenues*). In accordance with each due date, each tax is recorded as receivable/payable of central government²⁹.

The estimation specifies the original contractors of receivable/payable for each type of receivable/payable.

- Taxes

The total of tax receivable/payable of central government is allocated proportionally to households, nonfinancial corporations, and financial institutions, based on the financial statement of these institutions, with focusing on the type of taxpayer.

- Interests

The total of interest receivable/payable of financial institutions is allocated proportionally to households and private nonfinancial corporations, assuming interests accrue in accordance with the loans and deposits outstanding.

- Insurance

For unearned premiums and outstanding claim reserves, the total is assumed to revert to households.

- Customer loyalty award credits

The total of customer loyalty award credits is based on the sum of allowance for point gift certificates in the financial statements of issuing companies. It is allocated proportionally to holding sectors (households and nonfinancial corporations) based mainly on market surveys.

- Retirement benefit obligations

Unfunded retirement benefit obligations of nonfinancial corporations and domestically licensed banks are recorded as liabilities of these sectors. The same amount is then recorded as assets of the corporate pension sector.

The amount outstanding in this category is evaluated on a face value, while the transaction flow is recorded using term-on-term difference in that value.

Note:

Since tax receivable/payable is based on the delivered tax, unpaid tax receivable/payable (e.g. unpaid consumption tax of private nonfinancial corporations) is not concerned in the FFA. Because of limitations of source data, the tax concerned in this category is only national taxes, while local taxes are basically not included.

²⁹ Tax payables are recorded as accounts receivable of central government and as accounts payable of taxpayers (i.e. households and NPISH), while prepaid taxes are recorded as accounts receivable of taxpayers and as accounts payable of central government.

K. Outward direct investment (last update: October 2013)

The total of “Outward direct investment,” which is posted under overseas sector (liabilities side), is based on share capital of outward direct investment that is recorded in *the Balance of Payments Statistics* and *the International Investment Position of Japan*.

First, outward direct investments by the “Financial institutions” sector are estimated based on the year-end data of the “Finance and insurance” sector in the *Direct Investment Position by Region and Industry (International Investment Position of Japan)*. Then the amount is allocated proportionally to constituent sectors (domestically licensed banks, financial institutions for agriculture, forestry, and fisheries, and financial institutions for small businesses) according to the amount of foreign securities held by each sector in the financial statements. Investments by public nonfinancial corporations are based on the financial statements. Residuals—of which the investing entity is neither identified nor estimated—are regarded as investments by private nonfinancial corporations.

The amount outstanding in this category is evaluated at face value. The transaction flow is calculated and recorded by taking term-on-term differences in that value for financial institutions and public nonfinancial corporations. For private nonfinancial corporations, on the other hand, it is estimated by deducting the direct investment amount of financial institutions estimated above from “Equity Capital” in “Direct Investment” (assets side) recorded in the *Balance of Payments Statistics*. The reconciliation amount in this category results from the discrepancy between the cumulative flows of the *Balance of Payments Statistics* and the *International Investment Position of Japan* (stock).

L. Outward investments in securities (last update: February 2011)

The total of “Outward investments in securities” (posted under liabilities side of overseas sector) is specified by deducting AB *samurai* bonds (posted under structured-financing instruments) from the sum of securities investments recorded in *the Balance of Payments Statistics* and *the International Investment Position of Japan*, and foreign currency denominated securities included in the foreign currency reserves based on Ministry of Finance’s data on foreign currency reserves (*International Reserves/Foreign Currency Liquidity*).

Investing entity is based on the financial statement of individual institutions, as well as *the Balance of Payments Statistics* and *the International Investment Position of Japan*. More specifically, the amount of investment by financial institutions is estimated by deducting the external securities issued by residents and outward direct investment from foreign securities (that are listed in the financial statements). On the other hand, for the estimation of the amount of investment by households, the amount of investment by financial institutions other than depository corporations in the FFA is deducted from the sum of securities investments by “Public sector” and “Other sectors” recorded in *the Balance of Payments Statistics* and *the International Investment Position of Japan* and then estimated by using a certain ratio calculated from the past questionnaire survey to securities companies. The amount of investment by private nonfinancial corporations is the residual, derived by deducting the amount of investment by financial institutions, public sectors and households.

The amount outstanding in this category is evaluated on a market value basis.³⁰ The transaction

³⁰ Strictly speaking, the market value basis is not employed for “outward investments in securities” as a whole because the source data are financial statements that are regularly evaluated at face value. Also a market-value approach is not realized completely in overseas sector as the quarterly based end-term outstandings are made by building-up flows.

flow is recorded separately for some sectors by using data such as “Financial account” (of which, “Portfolio investment”) etc, in the *Balance of Payments Statistics*. The reconciliation amount in this category is obtained from the discrepancy between the cumulative flows of the *Balance of Payments Statistics* and the *International Investment Position of Japan* (stock), and from the change in the yen-converted amount reflecting exchange rate fluctuations (foreign currency denominated securities included in foreign currency reserves).

M. Other external claims and debts (last update: August 2014)

“Other external claims and debts,” which is posted under liabilities side, are the difference between “the difference between financial assets and liabilities in overseas, and financial surplus/deficit recorded in the *Balance of Payments Statistics*” and “all items in the FFA except other external claims/debts (e.g. deposits, loans, securities).”

For assets side, the portion held by financial institutions, private nonfinancial institutions, and central government is based on the *Balance of Payments Statistics*, the *International Investment Position of Japan*, and the financial statement of financial institutions.

The amount outstanding in this category is evaluated on a face value, while the transaction flow is recorded independently. The reconciliation amount in this category results from the discrepancy between stocks and flows recorded in the *Balance of Payments Statistics* and the *International Investment Position of Japan*.

Notes:

- (1) “Difference between financial assets and liabilities” in overseas is based on the total of net assets recorded in the *International Investment Position of Japan* (this is a built-up of flows by using the data in the *Balance of Payments Statistics*, except those at the end of year), while “Financial surplus/deficit” is based on the total of “Current account” and “Capital account” recorded in the *Balance of Payments Statistics*. The statistical discrepancies caused by the difference between these source data and the other items in the FFA are posted under “Other external claims and debts” of overseas sector.
- (2) As in the case of outward direct investment, the deviation between the estimated amount outstanding calculated by adding amount of flow from the *Balance of Payments Statistics* to the annually based term-end outstanding from the *International Investment Position of Japan*, and the amount outstanding of the *International Investment Position of Japan* as of the end for next year, is posted on the reconciliation amount.

M-a. Of which: Gold and SDRs (last update: August 2014)

This item includes monetary gold, SDRs and IMF reserve positions that are part of Japan's foreign reserve assets. These are specified according to data from the *Balance of Payments Statistics* and *International Investment Position of Japan*.

Among such items, monetary gold is the only asset that does not have corresponding liability, and therefore, its liability is not posted in any of the sectors.

Changes in the IMF reserve positions and SDR allocations after the third quarter of 2009 are posted as transaction flows.

N. Others (last update: August 2006)

“Others” includes credits and debts that are fictionalized in the accounting as follows.

(1) Credits and debts for coins:

Posted under central government and central bank.

(2) Credits and debts for Treasury:

Posted under public financial institutions, public nonfinancial corporations, central government, and social security funds.

(3) Claims and liability related to retirement trust:

Posted under households, private nonfinancial corporations, and financial institutions.

For financial institutions, public nonfinancial corporations, central government, local governments, and social security funds, the items that are not included in other categories (Category A-M) are posted under this category where the counterparties of these items are regarded as private nonfinancial corporations and households.